THE NATURAL HISTORY OF BIRDS;

IN THREE VOLUMES.

VOL. I.

CONTAINING THE FIRST AND SECOND PARTS.

[Price of the Three Volumes plain, 12s. sewed.]

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THE NATURAL HISTORY OF BIRDS;

CONTAINING

A VARIETY OF FACTS

SELECTED FROM SEVERAL WRITERS,

AND INTENDED FOR THE

AMUSEMENT AND INSTRUCTION

OF

CHILDREN.

WITH COPPER PLATES.

IN SIX PARTS.

PART I.

CONTAINING THE FIRST AND SECOND ORDER.

"We are apt to leave the Genius of Children, to physical, and natural Knowledge, uncultivated; their Ignorance makes them insensible; and to that Insensibility, may be ascribed their harsh Usage, of several Parts of this noble Creation, which has the Stamp and Voice of a Deity every where, and in every thing, to the Observing. It is a pity, therefore, that Books have not been composed for Youth, by Naturalists, that they might learn Things with Words."

WILLIAM PENN.

LONDON:

Printed for J. JOHNSON, No. 72, St. Paul's Church-Yard. 1791.

MVSEVM
BRITAN
NICVM

PREFACE.

THIS work is profeſſedly a compilation, but it would have been embarraſſing, and unneceſſary, to have referred every paſſage to the author from whom it was taken.

Candour, however, requires the acknowledgment, that LINNÆUS, BUFFON, PENNANT, and LATHAM have furniſhed almoſt the whole of the materials, although other natural hiſtorians of leſs note, have occaſionally been conſulted.

It is intended to comprize the ſix orders of birds, arranged according to the ſyſtem of LINNÆUS.

The object propoſed, being to combine amuſement with inſtruction, thoſe parts which are merely deſcriptive of the plumage, or the colours of the birds, are introduced as little as appeared conſiſtent with the whole of the deſign; and a ſtyle has been attempted ſuitable to the capacity

of a child, consisting of short sentences, and familiar and obvious expressions.

The generic characters do not, perhaps, come under this description; they are for that reason printed with a different type, and will be easily distinguished: yet a regard to system, and the purpose of instruction, render them necessary. It should also be remember'd, that these terms are the names of visible objects, and therefore the more easily acquired by children: the case is widely different with those words which are intended to express abstract ideas, because there the ideas themselves are not within the comprehension of a child. It may be further observed, that, in order to facilitate the acquirement of any science, it is essential to learn the terms which are generally employed by those who write upon it.

This little compilation was made for the children of a particular family: and it is much at the service of others, who may approve the plan, and incline to adopt it.

INTRO-

INTRODUCTION.

The Animal Kingdom conſiſts of Bodies which are organized, endowed with Life, with Feeling, and the Power of voluntary Motion.

Linnæus divides this Kingdom into Six Claſſes.

FIRST CLASS

Is viviparous (that is, produced alive;) the mother is furniſhed with milk for its young. The heart has two auricles and two ventricles. The blood is warm and red. The lungs breathe reciprocally. The jaw-bones lie one over the other; they are covered and have ſeveral teeth fixed in them. This claſs is called by Linnæus *Mammalia*.

SECOND CLASS

Is oviparous (that is, produced from eggs) which have a calcareous ſhell. The heart has two auricles and two ventricles. The blood is warm and red. The jaws, or mandibles, lie one over the other; they are naked, they project, and are not furniſhed with teeth. The ears have no auricles, or external ears. Their ſupports are two legs and two wings. Their bodies are covered with feathers, and they are called *Aves*, or Birds.

THIRD CLASS

Breathe *arbitrarily* from lungs, (that is, though breathing be neceſſary to them, it is not requiſite at

ſhort intervals.) The heart has one auricle and one ventricle. Their blood is cold and red. Their jaw-bones lie one over the other. The eggs of moſt are covered with a ſkin. They have a naked ſkin-like covering. They are called *Amphibia*, or Amphibious Animals.

FOURTH CLASS

Have external gills. The heart has one auricle and one ventricle. The blood is cold and red. Their jaws lie one over the other. Their eggs have no white. They are without ears. They are covered with ſcales which lie one over another. They have fins for ſwimming, and are called *Piſces*, or Fiſh.

FIFTH CLASS

The heart has one auricle and one ventricle. They have a cold ſanies inſtead of blood. Have antennæ, or a kind of horns; but no brains, ears, or noſtrils. They breathe through vent-holes arranged along their ſides. Their jaws are placed croſs-wiſe. They are covered with a kind of bony ſkin. They are called *Inſectæ*, or Inſects.

SIXTH CLASS

The heart has one auricle and one ventricle. They have a cold ſanies inſtead of blood. Their breathing holes are obſcure. The jaws are various, in various kinds. Their ſenſes conſiſt in their tentacula. They have no heads, ears, or noſtrils, or ſcarcely eyes:

Sometimes

Sometimes they have a calcareous covering or ſhell; ſometimes they are covered with ſpines, and ſometimes they have no covering. They have neither feet nor fins. They are called *Vermes*.

The whole Claſs of Birds is divided into Six Orders.

The firſt Order is called *Accipitres*; their beaks are hooked, their legs ſtrong, their claws bowed and ſharp, their bodies muſcular; they live on prey, build on high, lay about four eggs; they pair; and the female is the moſt ſtrong and beautiful.

Second Order is called *Picæ*; their beaks are compreſſed and convex on the back, their legs rather ſtrong, their food various; they pair, build moſtly in trees, and the male bird feeds the female whilſt ſhe ſits.

Third Order is called *Anſeres*; in many Genera the beak filters the water and retains the food; is wideſt at the end and covered with a ſkin; the feet are webbed for ſwimming, their feathers are the moſt uſeful of any kind, their neſts are generally built on the ground, the mother ſeldom broods the young, and many of the genera do not pair.

Fourth Order is called *Grallæ*; the beak in general is long, ſlender and cylindric; the legs are formed for wading, with thighs half bare of feathers; the tail ſhort, their fleſh well taſted; they procure

their food out of marſhy ſituations; their neſts are moſtly on the ground.

Fifth Order is called *Gallinæ*; the upper mandible is channelled, extending with a margin above the lower, and a little bowed; the noſtrils are covered with a cartilaginous membrane; they live upon grain, duſt themſelves, make an artleſs neſt, and lay many eggs.

Sixth Order is called *Paſſeres*; the beak is conic and ſharp at the point, their toes are divided, they feed on grain, inſects and ſeeds; their neſts are curious, they pair, and many of them ſing.

Some natural Hiſtorians have introduced another Order between the *Grallæ* and *Gallinæ*, which they call *Struthious:* under this they have placed the Oſtrich and Caſſowary, (which Linnæus has arranged under the *Grallæ*;) and the Dodo (which Linnæus places among the *Gallinæ*).

They have likewiſe divided the Sixth Order of the *Paſſeres* into two others.

1ſt. The *Columbæ* or *Columbine*, including Pigeons and Doves.

2d. The *Paſſeres*, or the remainder of thoſe which Linnæus has placed with the Paſſeres, many of which are diſtinguiſhed by their ſong.

THE

B L

ORDER I.

Genus I. Vultur.

VULTURE.

Published Oct.r 2.d 1786 by Jos. Johnson St. Pauls Church Yard London.

THE NATURAL HISTORY OF BIRDS.

ORDER I. ACCIPITRES.

GENUS I. VULTUR.

THE VULTURE.

The beak is ſtrait, except towards the end, where it is hooked, it is covered at the baſe with a thin ſkin.

There are no feathers on its head, or the upper part of its neck, but inſtead of feathers, a ſoft hairy down.

The tongue is bifid, that is, cloven, or divided at the point.

THERE are ſeveral kinds of Vultures; and they are found, ſome in the ſouthern parts of Europe, ſome in Aſia, ſome in Africa, and in the warmer parts of America.

They feed upon ſerpents, upon the eggs of crocodiles, and of alligators, and upon dead carcaſes, which they can ſmell a great way off.

In America there are many wild horſes and wild cows; the hunters kill them in order to get their ſkins, and they leave the dead bodies upon the ground: all this time the Vultures are flying after and watching them; and as ſoon as the hunters are gone, they come down in great numbers, and devour the bodies that are left. They are ſo greedy, and ſometimes eat ſo much, that they cannot fly from the place until they have brought up part of it again.

There are Vultures at the Cape of Good Hope, in Africa. When an ox or a cow is tired, and lies down in the field, the Vultures will ſometimes fly down upon it in great numbers, whilſt it ſleeps. They make a hole in its ſtomach, and eat out all its inſide; then they pick all the fleſh clean from its bones; ſo that if the ſkin were taken off there would be nothing left but a ſkeleton.

There are many Vultures in other parts of Africa, and at Grand Cairo, which is in Egypt, and by the river Nile. The Vultures, and the wild dogs together, eat all the dead bodies that they can find. They are of great uſe there; for

if they did not eat them, the ſmell would be very hurtful to the health of the people who live in thoſe hot countries.

In the river Nile there are numbers of crocodiles, who come out of the water to lay their eggs, which they bury in the ground. The Vultures ſit upon the trees and watch the crocodiles, and as ſoon as they are gone into the river, they fly down and ſcratch up the eggs, and eat them.

The King of the Vultures is the moſt elegant bird of this kind. It is found in South America. His head and neck are covered with a fleſh-coloured ſkin; behind the head it is of a deep red, and round his neck he has a looſe ruff of feathers; into this ſkin he can draw back and hide his head.

There is one kind of Vulture in Mexico, in America, that can raiſe the feathers behind its head, in the form of a crown; and it is ſaid, that with one ſtroke of its bill it could break the ſkull of a man.

But the Condor is the largeſt Vulture of all; it is the ſize of a ſheep; and when its wings are opened they are thirteen or fourteen, and ſome ſay eighteen feet acroſs.

One Condor is ſtrong enough to kill a cow, and two of them can devour it: when it flies down

down upon the ground, its noiſe is almoſt loud enough to make one deaf.

Sometimes it will venture to attack a boy of ten years of age, and often carries off a ſheep or a deer, and flies away with it in its talons; and it will take little children, if it can find them, to feed its young ones.

The Condor is found in the Andes, in South America; the Andes are the higheſt mountains in the world.

The claws of the Vulture are not ſo hooked as thoſe of the Eagle, becauſe they walk more upon the ground. Their eyes are not at all ſunk in their heads. They build their neſts amongſt rocks, very difficult to come at, and lay two or three eggs.

They ſmell very diſagreeably, and a very offenſive humour is conſtantly running from the noſtrils of ſome of them.

Under the feathers there is a fine down; and at Grand Cairo their ſkins are ſold and made into very comfortable dreſſes.

GENUS

B L

ORDER 1

Genus 2 Falco

EAGLE.

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GENUS 2. FALCO.

THE FALCON.

The whole beak of the Falco kind is hooked; it has a cere, which is a naked waxy ſkin, that covers the baſe of the beak. The noſtrils are ſmall, oval, and placed in the cere.

The head is cloſely covered with feathers; and the tongue is divided at the point. The legs and feet are ſcaly.

THERE are many ſpecies of the Falco genus, viz. Eagles, Falcons, Buzzards, Hawks and Kites.

There are Eagles in every quarter of the world; in Europe, Aſia, Africa, and America.

The Eagle can ſee farther and better than any bird; but cannot ſmell ſo well as the Vulture. It never eats any thing which it does not kill itſelf; and when it has eaten as much as it wants at once, it flies away, and does not come back to the ſame thing any more.—So that the Eagle is not nearly ſo greedy as the Vulture.

Eagles carry away fawns, and kids, and lambs, and hares, and rabbits, and partridges, and a great many other little animals, to feed their young ones;

ones; ſometimes an Eagle will kill a calf and drink its blood; but they never fly together in flocks, as the Vultures do; for only two Eagles live in the ſame place.

They live a long time, ſometimes more than an hundred years: and ſome have imagined that they at laſt die of hunger; for when the Eagle is very old, its upper mandible (or the upper bill) grows ſo crooked, that ſome have thought it could not feed itſelf.

If it die of hunger, when very old, (which perhaps may be a miſtake,) it can live a long time without eating.

The Emperor of Germany had one at Vienna, and the keeper forgot to give it any food for twenty-one days; yet it did not die.

There are many different kinds of Eagles.

One kind is called the Golden Eagle: when theſe Eagles grow old, the feathers of their heads, which were brown, turn grey.

They breed in high cliffs in the mountains of Ireland; and ſometimes they are found in Caernarvonſhire, in Wales, and on the mountain of Snowden which is in Wales.

There were two Eagles that built their neſt near a poor man's houſe in Ireland; the man had a large family of children; and every day when the

the old Eagles were gone, he climbed up to their neſt and took away for his family a part of the fawn, and ſome of the hares, and rabbits, and partridges, which they had brought for their young ones. When the little Eagles were almoſt ready to fly, he cut their wings, to keep them in their neſts; and the old ones continued to bring them hares, and kids, and rabbits, a great while longer.

In the Lake of Killarney, which is in Ireland, there are ſeveral iſlands. In one of theſe iſlands two Eagles had built their neſt, and hatched their young. A thoughtleſs boy went to rob this neſt, he pulled off his clothes, and ſwam to the iſland, when the old Eagles were away, and he was ſo cruel as to ſteal their young; he tied them with a ſtring, and had waded into the lake until the water reached up to his neck, and then began to ſwim.

The old Eagles were coming back to their neſt, and ſaw him taking away the Eaglets (or young Eagles); ſo they flew down upon him, and with their ſtrong crooked beaks, and ſtrong crooked talons, they ſoon killed him.

Eagles kill and devour poultry. In the Orkney Iſlands, which are a little north of Scotland, if any man kill an Eagle, every family in the pariſh is obliged to make him a preſent of a hen. In

thoſe

thoſe countries where Eagles live, it is not ſafe to leave infants out of doors. Two little children in Scotland were carried away by ſome Eagles to their young ones; but the Eagles were ſeen as they were flying away, and ſome people climbed up to their neſts, and brought away the infants before they were much hurt.

The emperor of Thibet, in Aſia, has many Eagles, who are taught to hunt and kill hares, deer, and foxes; and ſome of them have ſo much courage, that they fly down upon the wolf, and attack him with great fury. Another kind of Eagle is called the Black Eagle; there are many of theſe in Scotland; they will kill deer, and in the iſland of Rum, (which is on the weſtern coaſt of Scotland) there is not one left; the Eagles have killed them all.

Once there was found in the Peak of Derbyſhire a neſt of the Ringtail Eagle; it was made of great ſticks; one ſide reſted on the edge of a rock, the other on two birch-trees; upon the ſticks there was a layer or covering of ruſhes; over the ruſhes, a covering of heath; and then another layer of ruſhes. There was only one young one found in the neſt, and an addle egg; by theſe were three heath-cocks, a lamb, and a hare;

hare; the neſt was quite flat, and about two yards aroſs.

There are other Eagles, called Sea Eagles, and Oſpreys. They live upon fiſh, which they take by darting down upon them as the fiſh are ſwimming near the ſurface of the water. Their legs have no feathers.

The Oſprey builds its neſt on the ground among reeds, and lays three or four eggs; its outward toe eaſily turns backwards, and the claw of that toe is larger than the claw of the inner toe, which is very uſeful to the Oſprey for holding the fiſh, which are ſlippery.

Beſides theſe, there is the Bald Eagle of North Carolina, which was one of the Engliſh ſettlements in North America. The Bald Eagles breed all the year round; for when the young are covered with down, the old Eagle lays eggs in the neſt, and leaves them to be hatched by the warmth of the Eaglets.

The Bald Eagles cannot fly very faſt, but there are fiſhing hawks in America, which plunge into the water, and catch the fiſh: the Bald Eagle watches them, and whilſt the hawk is loaded with his prey, flies after him. The hawk is afraid, and, to eſcape, lets fall the fiſh, and the Eagle catches it before it reaches the water. The Bald

Eagle

Eagle watches the fowlers when they go out a ſhooting, and is ſure to catch all the little birds that they wound.

Beſides the Eagle, there are many other birds of the falcon kind, but they are all ſmaller than the Eagle. The Gentil Falcon is found in the Alps, which are very high mountains that divide France and Switzerland from Italy. Theſe Falcons are frequently caught, and made tame, and taught to fly after pigeons, and little birds, and to kill them.

There is in India an animal called the Antelope; it is ſwifter than a Greyhound, and will not ſuffer a man, with a gun, to come near it.

In order to catch the Gazelle, or Antelope, they take a Falcon and Greyhounds, and when they ſee the Antelope, the Falcon flies after him, and alighting upon his head flaps his wings, ſo that the poor Antelope cannot ſee which way to run; then the Greyhounds readily overtake and catch him. Sometimes Herons are taken by Falcons. The Heron is a larger bird than the Falcon, and ſtronger, and has beſides a very long beak. The Falcon endeavours to fly above the Heron, and frequently they riſe ſo high as ſcarcely to be ſeen from the ground. If the Falcon

get

get uppermoſt, he ſtrikes his talons at the wing of the Heron, ſo that the poor Heron, being diſabled from flying, may fall to the ground and be caught. But if the Falcon ſhould miſs his ſtroke, then the Heron ſtrikes his bill through the Falcon, and kills him. There are ſeveral other Falcons uſed for killing game, and they have all long wings.

Beſides the long-winged Falcons, there are others, which have ſhorter wings, and they are called Hawks and Kites.

The Kite has a forked tail, like a Swallow. In this it differs from all other birds of the Falcon kind, and its wings are longer than the Hawk's; he is almoſt always ſuſpended in the air, and his flight is ſo eaſy, that he ſeems to ſwim, or glide, rather than to fly. He uſes his tail to direct his courſe. Kites are very apt to deſtroy little chickens. At Conſtantinople, which is the capital of Turkey in Europe, they are very fond of Kites, for they are of the ſame uſe there, as the Vultures near Grand Cairo, in Egypt; and they are ſo tame, that they fly towards thoſe who whiſtle to call them.

Buſbequius ſays, that he ordered the inſide of a Sheep to be cut into ſmall pieces; he whiſtled to the Kites, and many flew about him; and when

when he threw the ſmall pieces of the Sheep into the air, they would catch them before they could fall to the ground.

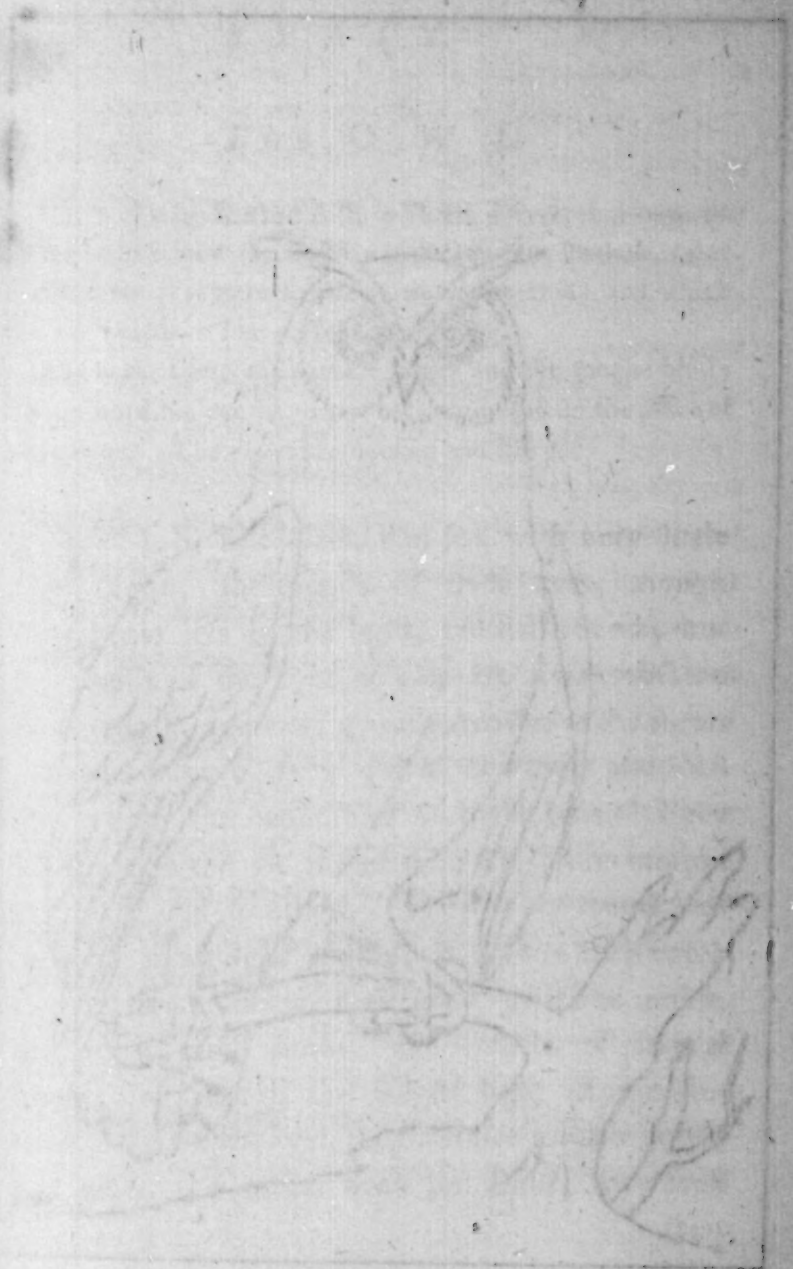
The Buzzard is a ſhort-winged Falcon. If the hen Buzzard ſhould by any accident be killed, the cock will ſit upon the eggs, and hatch the young ones. It lays its eggs ſometimes in a Crow's neſt, which it makes larger, and lines with wool.

The Keſtril is another. It builds in the hollow of trees, the holes of high rocks, or in old towers and ruins. We often ſee it high in the air, ſuſpended, and almoſt without motion. All this time it is watching for its prey, and frequently darts down and takes up a little chicken, if it ſtray from the hen: and this all other Hawks and Kites will do when they can.

Fowlers ſometimes uſe a Hawk, called the Hobby, when they go out to take Larks. When the Larks ſee the Hobby they lie cloſe to the ground through fear, and the Fowler draws his net over them.

There is a Falcon in America, called the Sufflator. When he is angry or affrighted he puffs up his head until it appears as large as his body.

Some of the Falcons not only eat hares, and rabbits, and ſmall birds, but they feed upon lizards, and worms, and inſects.



BL

ORDER 1

Genus 3 Strix

HORNED OWL.

Published Oct.r 2.d 1786 by Jos. Johnson & Paule Church Yard London.

GENUS 3. STRIX.

THE OWL

Has a ſtrong hooked Bill, without a cere, but covered at the bottom near the noſtrils with ſetaceous feathers, (that is, feathers that grow ſmaller towards the end,) and which fall backwards. The noſtrils are oblong.

The head, eyes, and ears are large, and the tongue bifid; the outward toe can be turned backward, and do the office of a hind toe. The claws are hooked and ſharp.

OWLS, like Cats, can ſee with very little light; the pupils of their eyes, though they grow leſs in the light, are ſtill round; but the pupils of the eyes of cats are always of the ſame length, and only grow narrower in the light.

Owls have a very quick hearing, and can move both the mandibles of their bills. They ſail through the air rather than fly, their motion is ſo eaſy and ſo ſilent. They enjoy themſelves moſt in moonlight nights; it is then they catch in greateſt abundance their prey, which is moles, and mice, and moths, and inſects of ſeveral kinds; for though the bright light of the ſun dazzle their eyes, yet they require a little light; and when the moon does not ſhine, they ſeek

their prey in the twilight of the evening and in the morning.

In the middle of the day they are quite overpowered with the light. The little birds do not like the owl, becauſe in the evening he flies after them, and would kill and eat them if he could. When they diſcover the place where he is in the day, they get together in great numbers, and fly about him and teize him; for they are not afraid of him then, when he is ſleepy, and cannot bear the glare of the light.

There are two diviſions of Owls; one is called the Eared or Horned Owls; becauſe they have feathers on each ſide of their head, which ſtand up like ears.

The other diviſion is called the Owls with ſmooth heads: but they have both large circles of feathers, which grow round the eyes.

Owls eat frogs, and mice, and lizards, and moles, which they ſkin with great ſkill. They ſometimes eat young pigeons and little birds; but though they ſwallow, they cannot digeſt the feathers, which remain a little time in their ſtomachs, and collect there in the form of balls. From time to time they throw up theſe little round balls, and a great number of them are found in the hollow trees, where they rooſt.

There

ORDER 1

Genus 3 Strix?

OWL *with smooth head.*

Published Oct.r 1.st 1786 by Jos. Johnson St Pauls Church Yard London.

There are ſeveral kinds of Owls; one kind is called the Tawney Owl. It is very large, and is found in Syria, which is in Turkey in Aſia. It will deſtroy little lambs, and little children too, when it can find them.

There is a brown Owl which kills hares, and rabbits, and moles, and ſkins them very curiouſly. This kind of Owl lives in England, and other parts of Europe.

In England too we find two or three kinds of Owls with ears, and ſeveral kinds of thoſe that have ſmooth heads.

The Eagle Owl, or great Horned Owl, is as large as a gooſe. The common White Owls frequently rooſt in barns, and the farmers are very fond of them, becauſe they kill the rats and mice that would eat their corn.

There is a very large kind of Owl at Hudſon's Bay, which is as white as ſnow. Hudſon's Bay is in North America.

No bird flies ſo ſmoothly as the Owl. In the duſk of the evening he ſkims ſilently near the ground, backwards and forwards, by the ſides of the hedges, in ſearch of mice, and frogs, and moles.

The great Horned Owl is ſometimes uſed to decoy the Kite. They tie to his leg a fox's tail, that he may make a ſtrange appearance. He is

then ſuffered to fly, and in that trim he ſails ſlowly along, flying very low, as all Owls do.

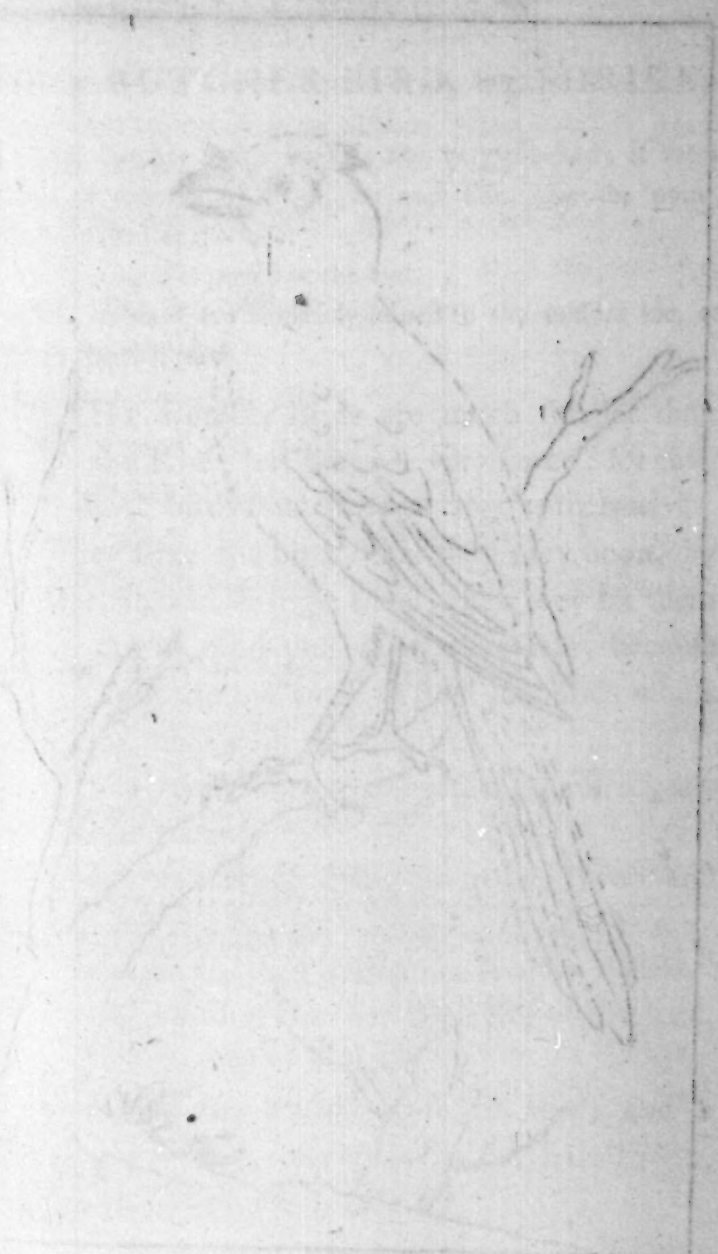
The Kite ſees him from above, and flies after him, thinking perhaps that he may be proper food, and ſo comes cautiouſly nearer and nearer; then the falconer lets a ſtrong hawk fly after the Kite, and catches him.

The great Horned Owl builds its neſt ſometimes in an old hollow tree, but more frequently in caverns of rocks, or in the holes of high and old walls. Its neſt is three feet acroſs, lined with leaves, and the Owl lays from one to three eggs. The Horned Owl ſeldom is at the trouble of making a neſt, but generally uſes the old neſt of a Magpye.

When he is attacked by other birds, he defends himſelf very well with his beak and his claws, and if the bird be ſtronger than himſelf he lies down on his back, and fights with his beak and his claws.

There is another kind of Owl, called the little Horned Owl. Theſe, like the Swallows, aſſemble together in Autumn to paſs into other climates.

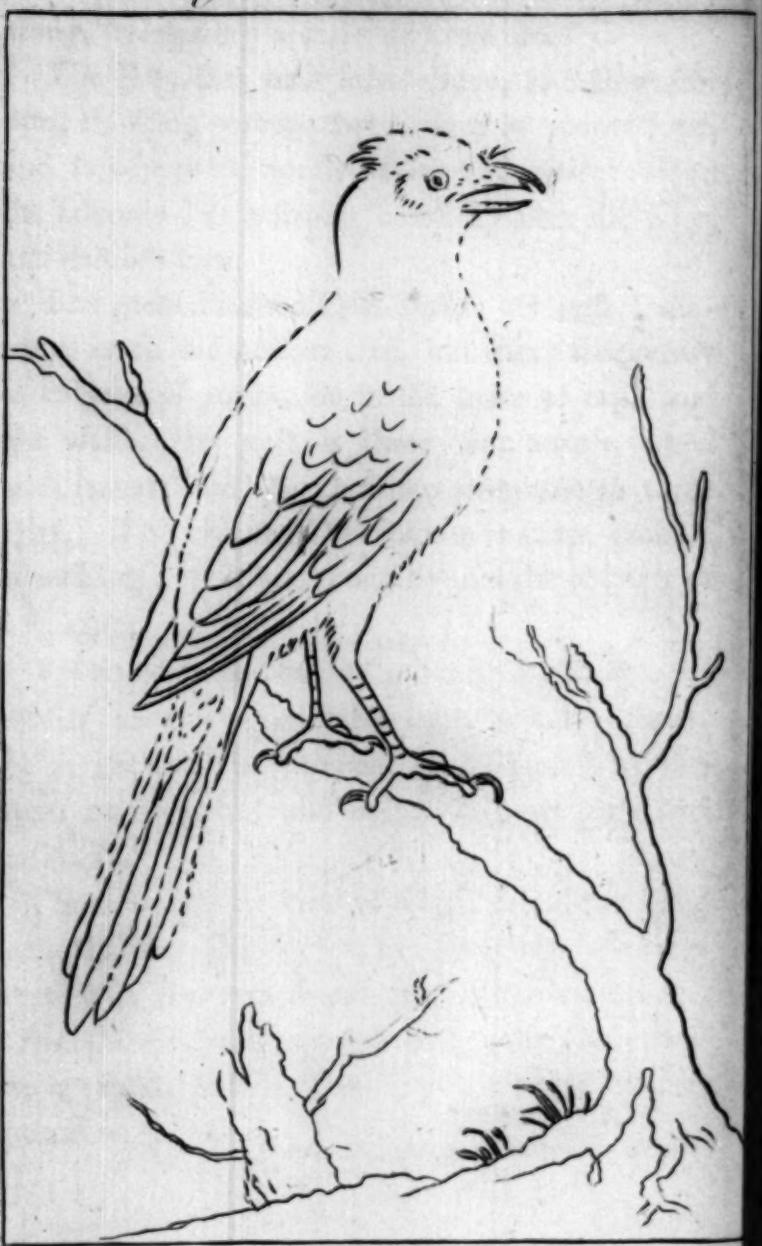
And there is an American owl, which burrows like a rabbit, and lays its eggs in a hole under ground.



B L

ORDER 1

Genus 1 — Lanius.



BUTCHER BIRD.

Published Oct.r 2.d 1786 by Jos. Johnson St Pauls Church Yard London

GENUS 4. LANIUS.

THE BUTCHER BIRD, OR SHRIKE.

The Butcher Bird's beak is not very crooked; it has a kind of proceſs, or tooth, on each ſide, near the point, and is naked at the baſe.

The tongue is jagged at the end.

The outmoſt toe is cloſely joined to the middle toe, as far as the firſt joint.

THE Butcher Birds are much ſmaller than the Kite; but they are very fierce: for they will attack birds four times as large as themſelves.

They ſeize the birds, that they prey upon, by the throat, and ſtrangle them; then they fix them upon thorns, and pull them to pieces, becauſe their talons are too weak to hold the birds whilſt they tear them with their beaks.

All the young ones live together, the firſt year, with their parents.

Their manner of flying is generally up and down, and not ſtraight forwards, or ſideways.

Beſides birds, they ſometimes feed on inſects.

Several kinds of Butcher Birds live in England, and in other parts of Europe.

One kind has a creſt upon its head, and is found in Bengal, which is in the Eaſt-Indies, (the Eaſt-Indies are in Aſia.)

There is a creſted Butcher Bird found in America.

One kind of the Butcher Bird watches the Hawks, and alarms the little birds when they are coming.

All the birds of which we have been reading; firſt, the Vulture; then the Falco, of which kind are the Eagles, Falcons, Hawks, and Kites; thirdly, the Owl kind; and fourthly, the Butcher Bird—they all belong to the order of the Accipitres, becauſe their beaks are hooked, the upper mandible is armed on each ſide with a kind of tooth; the noſtrils are wide.

Their feet are formed for reſting upon, ſhort and ſtrong. Under their toes they have warty knobs. Their claws are hooked, and very ſharp. The body, head, and neck muſcular; their ſkin tough. They are not proper for food. They live upon prey and carcaſes. In general they build their neſts high, and lay about four eggs. The female is the moſt beautiful and courageous. They pair.

As theſe birds live upon prey only, or animal food, we ſee how kind Providence has been, in giving them very good eyes to ſee their prey at a diſtance; and ſtrong bills, and ſtrong talons, to pull it in pieces; and they can fly very ſwiftly to overtake it.

If

If there were no Vultures in hot countries, the dead bodies, and the inside of cows and sheep, which are thrown away, would soon become very offensive, and occasion many disorders among the inhabitants; besides, they eat the Serpents and Crocodile's eggs, and prevent them from increasing too fast.

In Palestine, or the Holy Land, which is in Turkey in Asia, they would be overrun with Rats and Mice, if the Vultures did not destroy them.

If there were no Eagles, nor Falcons, nor Hawks, nor Kites, perhaps the little birds which they prey upon, would increase so fast, that there might not be food enough for them, and then almost all of these little birds must be half famished. It is better for them that a few should be killed by birds of prey, than that all should pine away and die of hunger.

Almost all birds of prey lay very few eggs, and have very few young ones. Providence has prevented their increasing very fast, for if they did, they would soon destroy all the little birds, and at last die of hunger themselves.

The Owls are very useful to us in killing Mice and Rats, that would destroy our corn, and Moles that get into the fields, and would throw out the corn by its roots.

God is very wiſe, and very good; for every creature he has made was made for ſome good purpoſe; and he has given to each the power of taking care for itſelf.

ORDER II. PICÆ.

GENUS 5. PSITTACUS.

PARROTS

Have hooked beaks, the upper mandible is moveable, and furniſhed with a cere in ſome ſpecies.

The tongue is fleſhy and obtuſe (that is blunt); and not divided. The head is large, and the crown flat.

Two of its toes are placed before, and two behind; and its legs are ſhort.

THE ſituation of the toes in the Parrots, two being placed before, and two behind, makes them very uſeful in climbing trees; and they have the power of turning one of the hind toes before, which they do when they take any thing in their claws to eat, ſtanding all that time on the other foot.

As Parrots cannot hop from tree to tree, they uſe both their beaks and their claws in climbing; firſt

ORDER 2

Genus 5 Psittacus.

PARROT.

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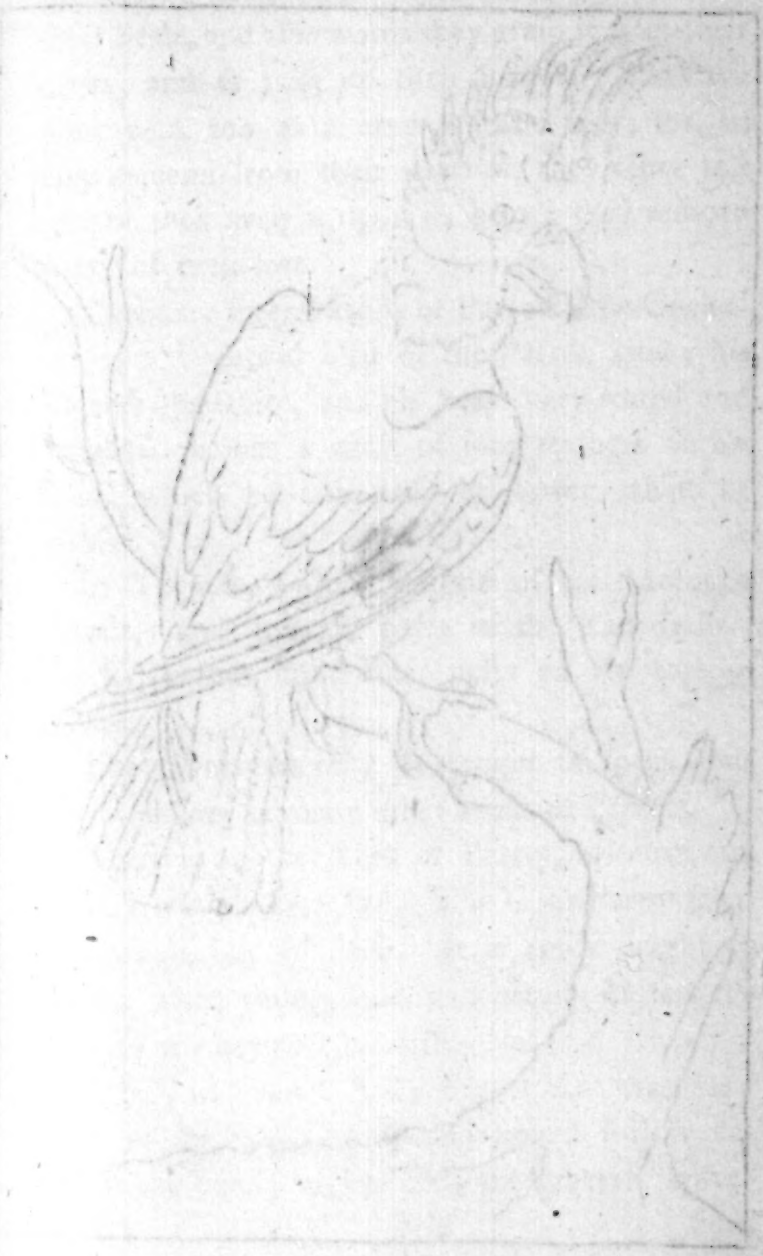

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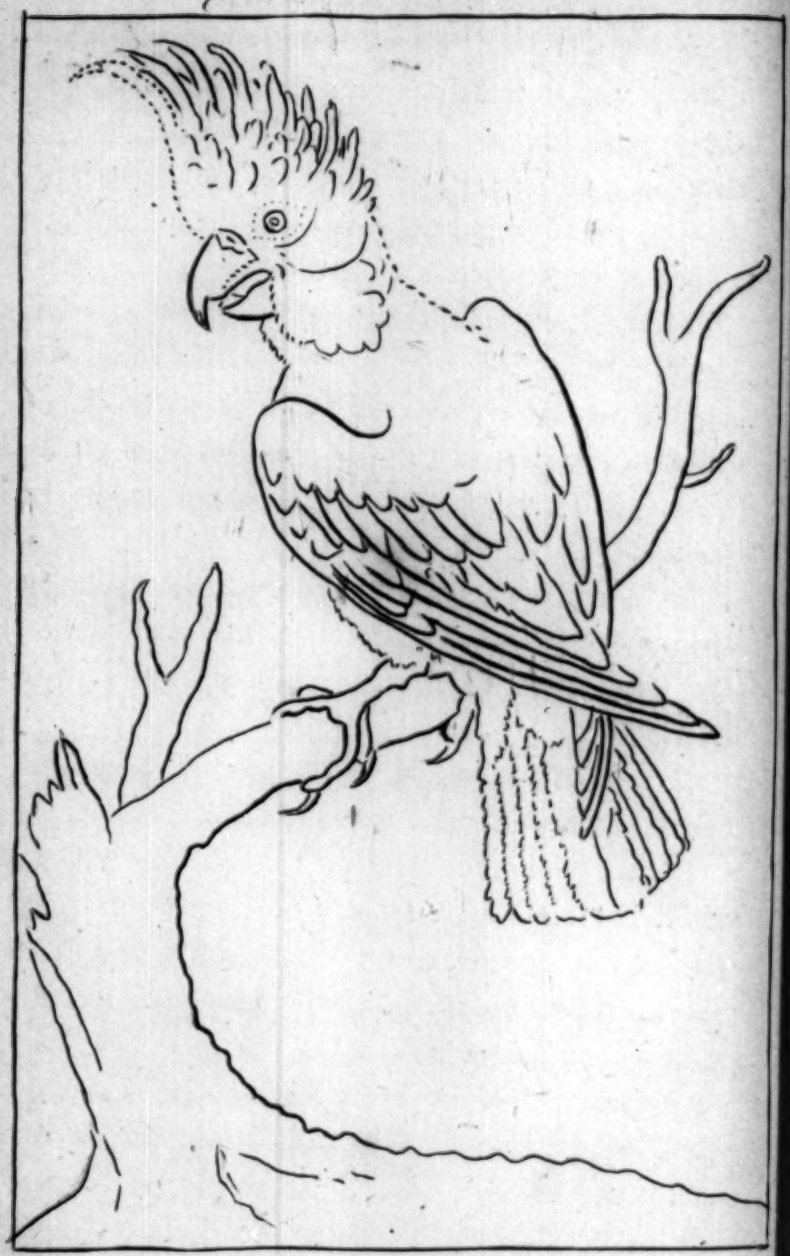

COCKATOO.

Published Oct.r 2.d 1786 by Jos.Johnson St.Pauls Church Yard London.

firſt taking hold of the branch above them with their beak, and afterwards they graſp it with their claws, and ſo raiſe up their bodies. They uſe their beak too as a kind of third foot; for, as they deſcend from their perches, they often reſt part of their weight upon it, before they remove either of their feet.

There are ſeveral kinds of Parrots: the Cockatoo is a beautiful bird of the Parrot kind; his feathers are white, and his beak very round and crooked: he has a creſt of long feathers on his head, which he can raiſe or lower when he pleaſes.

In Ternate, (which is one of the Molucca iſlands,) and in other parts of the Eaſt Indies, the Cockatoos build their neſts on the tops of houſes.

The Cockatoo may be taught to ſpeak, but not ſo plainly as many other kinds of Parrots.

There is another kind of Parrot, without any creſt, having a ſhort tail. The Grey Parrot from Guinea is one of theſe. It is eaſily taught to ſpeak, when young, and will readily imitate the tone of a voice that is harſh.

A lady in France had a Parrot that was very fond of the cook-maid, and would follow her about the houſe, and expreſs the greateſt ſatifac-

tion, and fondneſs, when he had climbed upon her ſhoulder.

The maid had once a ſwelled finger, which gave her great pain. All the time ſhe was ill, the Parrot would not leave her chamber, but ſeemed very unhappy; eſpecially when her pain was ſo violent as to make her complain.

Scaliger ſpeaks of a Parrot who had learnt to imitate the Savoyards' dance, and to repeat their ſong. The Savoyards live near the Alps.

The Parrot eats almoſt any thing, when he is kept tame; but meat, which he is fond of, is very hurtful to him; it brings on a diſorder, which makes him gnaw and pull out his feathers.

There is a great variety of Parrots in Brazil, in South America; and the people there ſpend much of their time in teaching them to talk. They have the art of improving the colours of Parrots: when they are young, it is ſaid that they pull out ſome of the feathers, and drop upon the part the blood of a beautiful Frog, which is found in Brazil. This Frog is of a fine blue colour, with lines of gold; and the new feathers of the Parrot, which would have been green, by theſe means, become yellow or red.

But it is very cruel, even in Savages, to do ſo.

They

The natives catch the young Parrots by cutting down the trees in which the neſts are built; and they ſhoot the old ones with blunt arrows, or pieces of ſtick, covered with cotton, which beats down the Parrot, but does not always kill it. Sometimes they make a fire under the trees where the Parrots are, and throw upon it gum, and green pimento, (a kind of ſpice,) which produce a ſmoke that ſtupifies the Parrots, and they drop from the tree.

Some of the ſmaller Parrots are very nice food. In South America, on the banks of the river of Amazons (which is the largeſt river in the world,) the Indians kill Parrots and Monkies with little arrows; the points of theſe arrows have been dipped in the juice of a poiſonous plant, and they blow them through a hollow piece of cane.

Parrots live generally upon the fruit and ſeeds of trees. They are very fond of the ſeeds of the cotton-tree, but that ſoon intoxicates them. When they eat the ſeeds of ſpice-trees, their fleſh taſtes like cloves and cinnamon.

They generally build their neſts in the holes of hollow trees; eſpecially thoſe which have been made and forſaken by Woodpeckers. It is ſaid, that in Africa, ſeveral kinds of Parrots fix their neſts at the end of the ſlender twigs of a tree, for

Church Yard London.

fear of the Monkies. When they are kept tame, they are ſubject to fits; they ſometimes fall down ſuddenly, and lie for a little while as though they were dead.

Parrots are in ſuch numbers at Bengal, (which is in Aſia,) and on the coaſt of Africa, that the Indians and Negroes are obliged to watch their fields about the time that their maize, (or Indian corn) and their rice is ripening, to prevent the Parrots from deſtroying their harveſt.

There is a kind of Parrot called the Paroquet.

Some Paroquets have ſhort tails, like the Cockatoo and Grey Parrot; and others have long tails, which end in a point.

Paroquets generally fly in flocks; they are green, like the leaves of the trees, and fowlers find it very difficult to ſee them. When a Paroquet diſcovers a tree which bears the berries that he likes, he makes a loud cry, to inform the reſt, who immediately follow; and then the fowler ſhoots in among the flock and kills many of them.

The Maccaws are the largeſt of the Parrot kind: their colours, in general, are very beautiful, and their tails very long. They frequent the moiſt lands which are planted with palm-trees. They generally fly in pairs, and perch on

ORDER 2

Genus 3 Psittacus.

PAROQUET.

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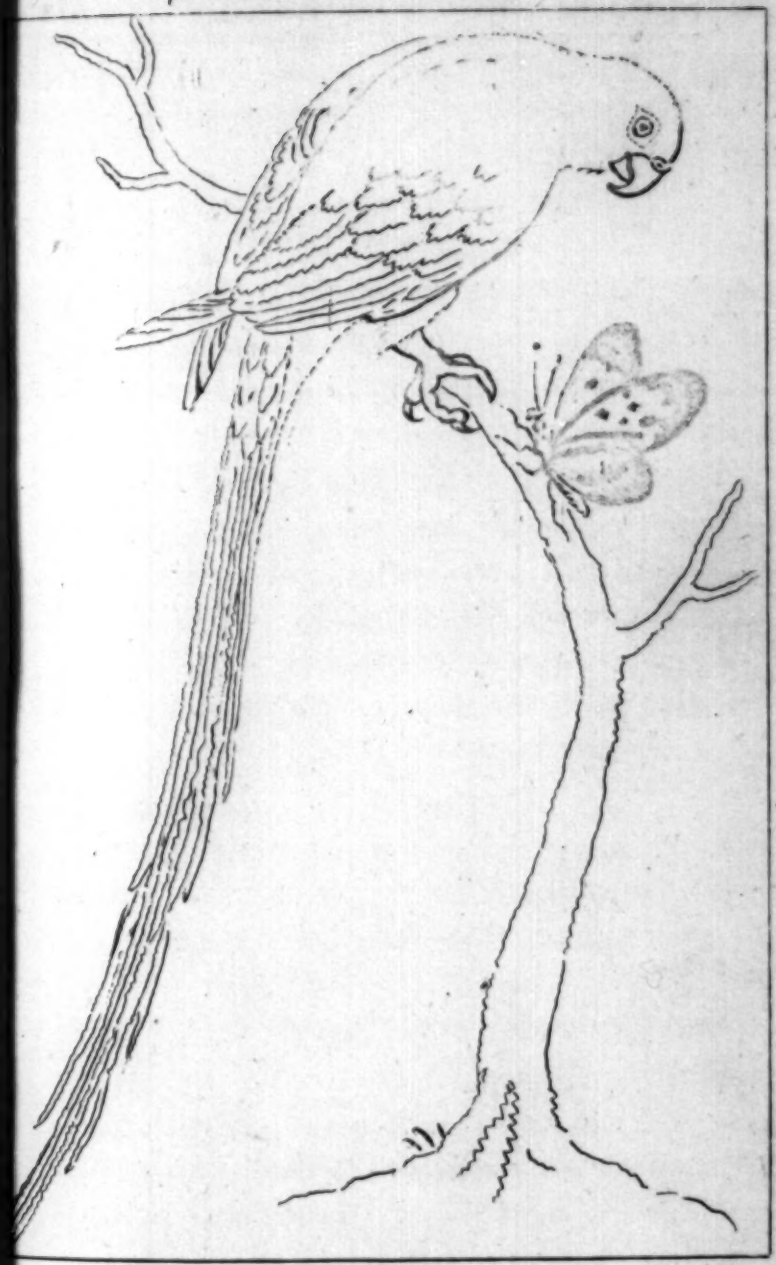
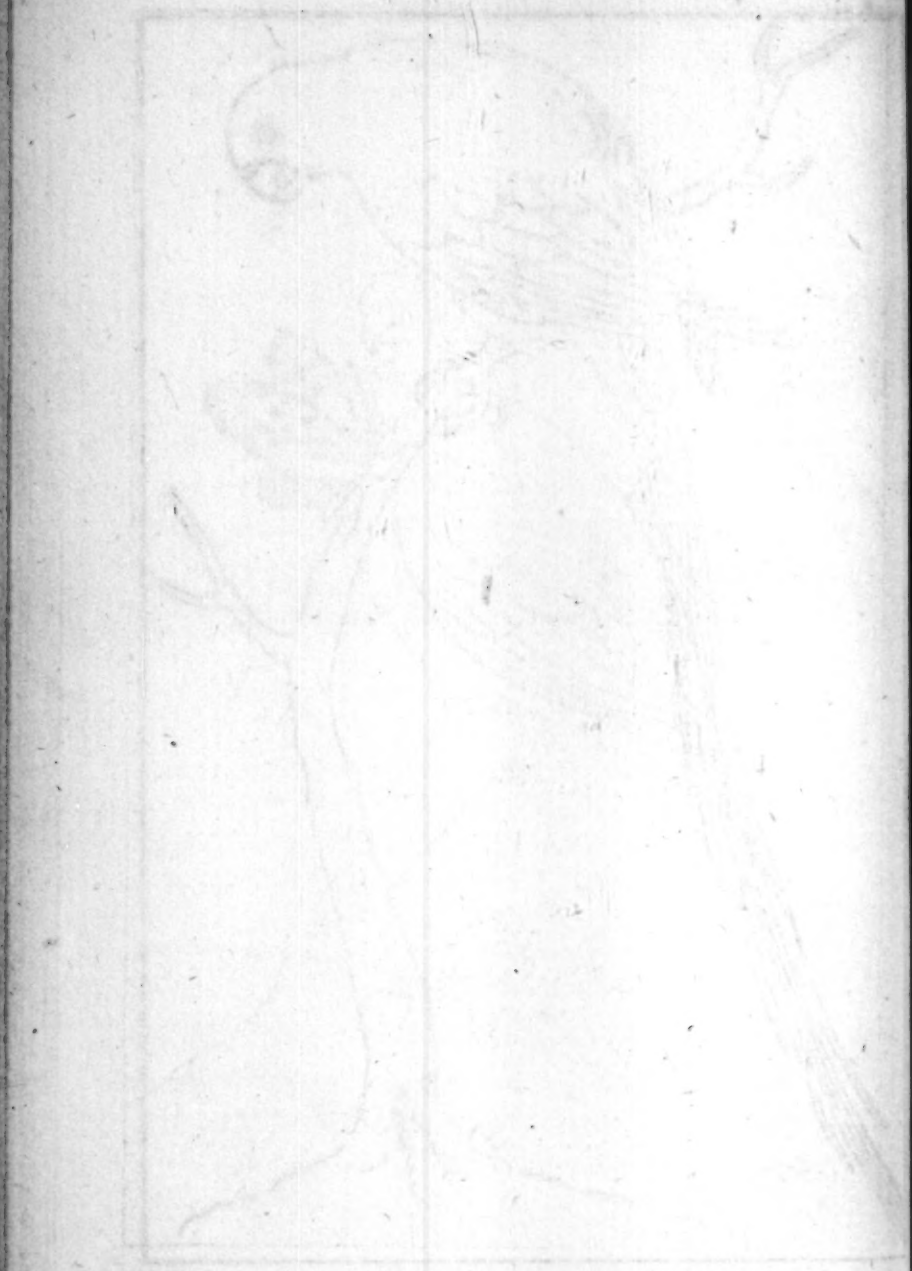
ORDER 2

Genus 5 Psittacus.



LONGTAILED PAROQUET.

Published Oct.r 2.d 1786 by Jos. Johnson St Pauls Church Yard London.



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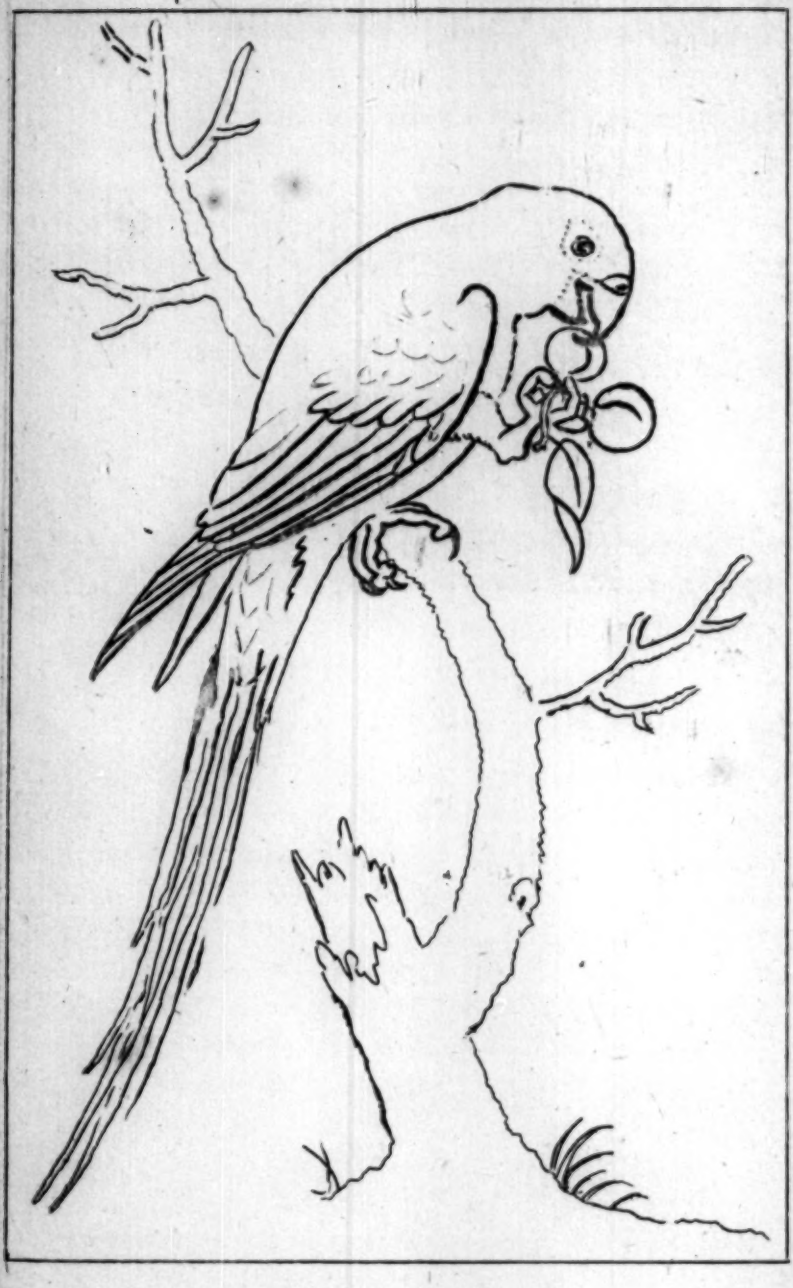


MACAO.

Publish'ed Oct.r 2.d 1786 by Jos. Johnson St. Pauls Church Yard London.

the tops of trees; they line their neſts with feathers, and lay two eggs. They have young ones twice a year; and the little Maccaws have often two ſmall worms in their noſtrils, which die of themſelves.

The Savages of the Antilles, (which are iſlands in the Atlantic Ocean, near America,) watch the moment when they are eating the fruit which has fallen from the trees, and on a ſudden they ſhout and clap their hands, and make a very loud noiſe; the Maccaws, terrified, forget the uſe of their wings, and ſuffer themſelves to be taken. The Indians wear their feathers in their ears, and in their caps, and ſometimes in their noſes.

If a ſmall quantity of parſley be given to a Maccaw, it occaſions a thick matter, like glue, to run from his beak, and he dies in an hour or two afterwards.

GENUS 6. RAMPHASTOS.

THE TOUCAN.

The Toucan's beak is very large, hollow, convex, and toothed like a ſaw on the edge, but irregularly.

The noſtrils are behind the baſe of the beak.

The tongue is fringed like a feather.

In moſt, two of its toes are placed before and two behind, for climbing.

ONE kind of the Toucans is about the ſize of a Magpie, the head is very large, in order to ſupport its bill; though the bill is very light, and not much thicker than parchment.

Between the head and the bill is a black line, and there the noſtrils are placed; but they are ſo covered with feathers, that ſome have thought that the Toucans breathed through their beaks, and had no noſtrils at all.

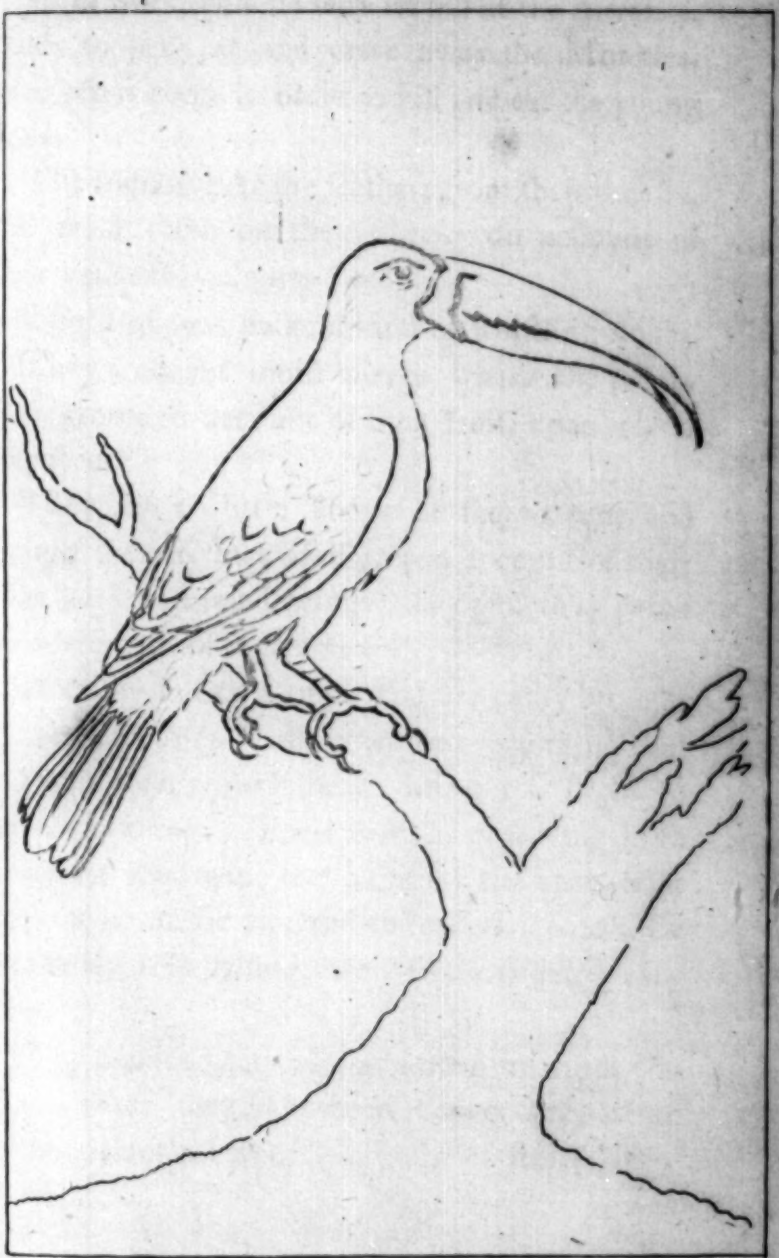
It lives chiefly upon the pimento, which it is very fond of, and it will eat fruit.

A Toucan was brought up tame; it was fed in the ſame manner as a Parrot; grapes were its favourite food; if they were pulled off the bunch and thrown into the air, it would catch them before they reached the ground.

If

ORDER 2

Genus 6 Ramphastos.



TOUCAN.

Published Oct.r 2d 1786 by Jos. Johnson St Pauls Church Yard London.

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It is an American bird, and builds its neſt in the holes of trees, and ſits with its bill at the entrance, ready to peck at and drive away the Monkies, who often come in order to kill and eat the young ones.

The Indians take the feathers from their breaſts, and wear them on their cheeks on account of their beautiful colours.

The Toucans make a kind of whiſtling noiſe.

They frequent moiſt places where the palm-trees grow, on account of their fruit, upon which they feed.

They fly in little flocks of ſix to ten, and though they fly awkwardly, (on account of their large beak and ſmall wings) they generally perch upon the tops of high trees.

They lay but two eggs, and are eaſily brought up tame. They ſwallow whole every thing that is given them, their beaks being too ſlight to break any thing. Their manner of feeding is to take their food with the point of the beak, and throw it up in the air, and to receive it into their throats as it is falling, their ſwallow being very wide.

They cannot bear cold, and even in warm climates, when they have been tamed, they make for themſelves a bed of leaves, or of ſtraw, or of any

any thing they can get, to keep themſelves warm in the night.

The legs of the Toucan are ſhort, ſo that they can not well walk, but are obliged to hop.

GENUS 7. BUCEROS.

THE INDIAN RAVEN, OR HORN BILL, OR CALAO.

The beak is convex, bending, with ſharp edges, like that of the Crow; large, and toothed like a ſaw, or rather jagged at the edges

The ſkull naked towards the forehead, with a large gibboſity (or lump) riſing upon it, and extending along part of the beak.

The noſtrils are behind the baſe of the beak.

The tongue is pointed and ſhort, and

The feet like the King Fiſher's (that is to ſay)

The outward toe is united to the middle toe as far as the third joint. The legs are ſcaly.

THE beak of the Buceros (or Calao) is ſo tender, that it breaks at the edges very eaſily; and the upper and lower mandible only meet at the point.

They are found ſome in Africa, and ſome in Aſia.

The

Genus 7 Buceros.

INDIAN RAVEN.

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B L

The falſe or upper beak is not ſolid, in that caſe it would be too heavy; but it is formed of a light, ſpongy ſubſtance, like the cells of a honey-comb.

The Cálaos (or Indian Ravens) which live in China, feed ſometimes on carcaſes, and, like the Vulture, they follow the hunters.

Some kinds of the Buceros feed upon frogs and lizards, and one kind has two horns.

One kind of the Calao has no knob or prominence on its beak, but it is very large, and in the form of a ſcythe. In the beak of the Calao of Manilla there is a ſlight eminence. It is larger in the Calao of the iſland of Panay, ſtill more conſiderable in the Calao of Malabar on the weſtern coaſt of India, and monſtrous in the Calao Rhinoceros.

A Calao from Malabar was kept at Paris in a garden nearly a whole ſummer; he was fed upon fruit and lettuces, but he would eat fleſh and rats, and once he devoured a bird.

The Calao Rhinoceros hunts rats, and feeds upon them; and for this reaſon he is brought up tame in the Eaſt-Indies.

The legs of all the Calaos are ſo ſhort, that they walk very awkwardly.

GENUS

GENUS 8. BUPHAGA.

THE BEEF-EATER.

The beak is ſtraight, and rather four-ſided; each mandible is enlarged at the end. Its feet are formed for walking or hopping; that is, it has three toes before and one behind. The twelve feathers of its tail are rather pointed.

THE colour of the body is a browniſh grey. It is found in Senegal, in Africa, and feeds upon the larvæ of flies, that is, upon the little maggots that become flies: in order to procure them it perches on the backs of Cows, and pierces their ſkin with its beak, and thus takes away the larvæ, which were produced from the eggs that the flies had laid there.

There are ſome flies which have a little piercer in the tail part of the body, and they make holes with it into the ſkin of cattle, and ſo lay their eggs there.

GENUS 9. CROTOPHAGA.

THE ANI.

The beak is compreſſed, thin, but deep; a little oval; arched, and with a keel on the top; the upper mandible bowed, and the lower ſtraight. The Noſtrils round. Tongue flat, and pointed at the end.

Toes two before and two behind, for climbing.

Ten feathers in the tail.

THEY live in Africa and America, and fifty of them often build together a very large neſt. Their food is graſshoppers, and the ticks which infeſt cattle. The oxen ſuffer them quietly to pick the ticks from their ſkins, which, but for theſe birds, would increaſe ſo faſt as to be quite troubleſome.

The Crotophagæ, or Anis, fly in little flocks. They cover their eggs with leaves, and whilſt ſome are ſitting, others are enlarging the neſt. Sometimes they ſeparate their eggs by little partitions.

If one ſees a cat or any other animal that would hurt them, he informs the reſt by a very ſhrill cry.

GENUS

GENUS 10. CORVUS.

THE RAVEN.

In the Corvi, the beak is ſtrong, convex, and ſharp at the edges; it is covered at the baſe with ſetaceous feathers, (or feathers like briſtles.)

The tongue is cartilaginous, or griſly, and divided.

The outmoſt toe cloſely connected with the middle toe as far as the firſt joint, and the feet formed for hopping or walking, or three toes forward and one backward.

THERE are many birds of the Corvus genus, viz. Ravens, Carrion Crows, Rooks, Royſton Crows, Jackdaws, Jays, Magpies, Nutcrackers, Corniſh Choughs, &c.

CORAX. THE RAVEN.

Ravens are found in England, and almoſt in every climate in the world.

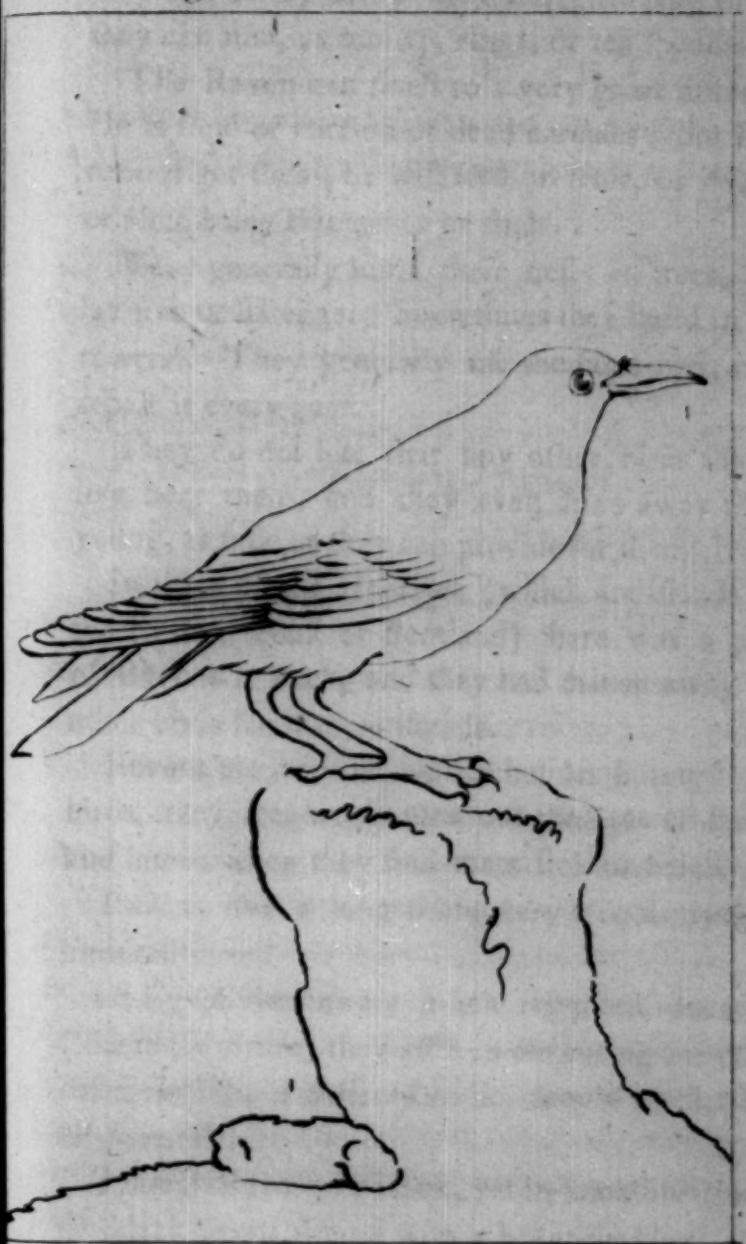
They fly in pairs, and will deſtroy other birds if they can take them unawares.

Sometimes Ravens are grey, and ſometimes white, but this is not very common.

A Raven may be taught to catch birds like a Hawk, to fetch and carry like a Spaniel, and to ſpeak like a Parrot; and ſome have been taught to ſing like a man. When Ravens are tamed they become very great thieves, for they not only take any thing which they may want to eat, but they are very

ORDER 2.

Genus 10 Corvus.



RAVEN.

Published Oct.r 2.d 1786 by Jos. Johnson St Pauls Church Yard London.

B L

very apt to fly away with any glittering things they can find, as money, rings, or tea spoons.

The Raven can smell to a very great distance. He is fond of carrion or dead carcases; but if he cannot get them, he will feed on fruit, or insects, or almost any thing that he finds.

They generally build their nests in trees, and lay five or six eggs. Sometimes they build in old towers. They generally use the same nest, only repair it every year.

They do not like that any other birds should live near them, and they even drive away their young, as soon as they can provide for themselves.

In three of the Hebrides (which are islands on the western coast of Scotland) there was a pair of Ravens in each, and they had driven away all other birds from those islands.

Ravens are very cruel, for besides killing little birds, they frequently pick out the eyes of sheep and lambs when they find them sick or helpless.

Ravens live a long time, very frequently one hundred years.

In Egypt Ravens are much regarded, because (like the Vulture) they assist in devouring the carcases, which, if suffered to lie, would smell very disagreeably.

Though Ravens be black, yet in some situations the black seems tinged with a beautiful blue.

When

When the weather is clear, they frequently amuſe themſelves by flying to a very great height.

When they have hatched their young, they feed them (as the Pigeons feed their little ones) with food which they have prepared in their own ſtomachs.

They are very fond of cherries, which they ſwallow whole, and after ſome little time they throw up the ſtones and the ſtems.

Ravens walk when they are upon the ground, but do not hop. Sometimes, during ſtorms, they are ſeen flying through the air, their beaks ſeemingly pointed with fire, it may be the lightning from the clouds.

CORONE.

THE CARRION CROW.

THE Carrion Crow in the form of its body and manner of living, is like the Raven. It feeds on carrion, and ſometimes on grain and inſects, and will often pick out the eyes of young lambs. It lays five or ſix eggs, like the Raven; and like the Raven, it is ſometimes found black and ſometimes white.

In the ſummer Crows live in the woods, and deſtroy a great number of Partridges eggs, which they pierce very ſkilfully with their beaks to carry to their young. In

In the winter they mix with the Rooks, and are often ſeen perching on the backs of Sheep and Pigs to eat the inſects there.

When they pair, they do not, like Rooks, build near one another, but each pair has for itſelf a compaſs of near a mile.

They are ſometimes taken by naughty boys, who twiſt pieces of paper in the form of cones, or ſugar loaf papers. Towards the bottom they put a piece of meat, and ſpread bird-lime all round the inſide of the cone near the edge. They then make little holes in the ground, and place theſe papers with the point downwards. The Crows fly down when they ſmell the meat, and put their beaks into the paper to take it out; the bird-lime ſticks the cone to the feathers round their necks, ſo that it covers their eyes: and the poor crows, not being able to ſee, fly about, ſome ſtraight up very high, others againſt trees and buildings, where they hurt themſelves. Little boys do not perhaps conſider this, for we would hope they could not intend to be ſo cruel.

Crows feed upon inſects, worms, grain, and fruits; they break nuts by letting them fall out of their beaks from a great height upon a ſtone, and then pick up the kernel.

FRUGI-

FRUGILEUS.

THE ROOK.

ROOKS are gregarious, (that is, they live together in numbers.) They very much reſemble Crows, but the bill of the Rook is generally bare of feathers as far as the eyes, becauſe it is frequently thruſt into the ground to pick out grubs and earth-worms. Its feathers are more gloſſy than the Crow's, and it is a much more innocent bird, for it lives moſtly on grain and inſects.

Rooks build in woods and foreſts, and frequently in groves near houſes.

When once a certain number have agreed to live together, they do not ſuffer any ſtrange Rooks to come amongſt them. Early in the ſpring they meet together in their grove which they had forſaken in the winter, having left only five or ſix of their company, perhaps to prevent others from coming there.

They then keep together in pairs. The old Rooks, who built there laſt year, go to their old neſts, which only want a little mending; but the young ones of the laſt year have to fix upon a proper ſituation, about which they are very nice;

nice; for ſome branches are two weak, and ſome are not forked enough, and ſome perhaps may be too near another neſt; for the old Rooks will not allow themſelves to be diſturbed by the younger ones. The young Rooks to ſave themſelves trouble, will frequently watch their opportunities to ſteal ſticks from another neſt; but as ſoon as they are diſcovered, a number of Rooks aſſemble, and pull to pieces all the neſt they have been building; then they have to begin the whole again: ſo they loſe much time, and have much trouble, which they would have ſaved if they had not ſtolen from others.

Whilſt one of the Rooks is gone to get the ſticks and roots of graſs to make the neſt, the other ſits upon the tree to guard it; and if they be very induſtrious, the neſt is finiſhed in three or four days.

Rooks live very much upon worms and inſects, and frequently turn over with their beaks the ſtones which lie upon the ground in ſearch of them.

They lay four or five eggs; and whilſt their young are unfledged, they feed them with the food which they have ſwallowed, as the Pigeon does.

CORNIX.

CORNIX.

The ROYSTON CROW

IS very much like a Rook. It lives in Europe, but in England it is only a bird of paſſage.

It comes in the winter, and leaves us when the Woodcocks go away. It breeds in Sweden, and builds in trees. It breeds too in Germany, on the banks of the river Danube.

When the Royſton Crows are on the ſea-coaſt, they eat crabs and ſhell-fiſh, but at other times they feed upon grain, caterpillars, inſects, and carrion. The head, and back, and wings of this bird are black, gloſſed over with a beautiful ſhining blue.

MONEDULA.

The JACKDAW

BUILDS in ſteeples, old ruins, and high rocks, and lays five or ſix eggs; his head is large for the ſize of his body. Jackdaws fly together in flocks: and feed on inſects, on grain, and on ſeeds. The back part of his head, his breaſt,

breaſt, and ſtomach, are aſh-coloured; and all the reſt of his body is black, gloſſed with blue. Sometimes the Jackdaw is kept tame in a cage, and taught to ſpeak.

GLANDARIUS.

THE JAY.

THE Jay is a moſt beautiful bird. Its wings are barred, or ſtriped, with black and blue; the neck, back, breaſt, and ſtomach, are of a faint purple colour, mixed with grey.

The young follow their parents until ſpring. In the ſummer they eat peas and cherries in the garden; and in autumn they live upon acorns, and ſometimes they kill ſmall birds.

Their natural note is very diſagreeable; but they are eaſily taught to ſpeak.

The forehead of the Jay is white, with black ſtreaks; and his head is covered with long black feathers, which he can raiſe when he chuſes, and then they form a creſt.

The Jay is a very ſilly, and paſſionate bird; and ſometimes in his anger, entangles himſelf between two branches and ſo dies.

When the Jay perceives a Fox, he cries out, and a great number of Jays immediately come to him, and endeavour to frighten the Fox with their noiſe.

Like the Rook and the Magpie, he hoards that food which he does not immediately want to eat, and ſometimes forgets where he has left it. The nuts that he has buried in this manner begin to grow in the ſpring.

There is one kind of Jay that has red eyes, and its feathers are almoſt white.

PICA.

THE MAGPIE.

THE Magpie's bill is very much like the Butcher Bird's, for it has a ſharp proceſs (or notch) near the end of the upper mandible. He lives upon worms, and inſects, and ſmall birds, and carrion. If he meet with a lark that is wounded, or a Chicken at a diſtance from the Hen, he is ſure to kill and eat them.

Magpies frequently perch upon the back of cows and ſheep, and eat any little inſects that breed there. They ſeek for the neſts of little birds, and very often ſuck their eggs.

There

There is ſcarcely any-thing which Magpies do not eat; and they are very careful too, for when they have had enough they endeavour to hide what is left for another time.

The Magpie is very ingenious in building his neſt: it is made firſt of ſmall twigs of hawthorn, and the thorns ſtick outwards, they are faſtened together with roots of graſs; it is then lined with graſs and wool, and plaſtered within with mud. The neſt is very large: and as it may eaſily be ſeen, and the Kites and Hawks would be very apt to take away its young, it is (perhaps for that reaſon) quite covered on the top with thorns: theſe thorns are curiouſly faſtened together, ſo that only one little hole is left for the Magpie to get in at.

The Magpie's head, and throat, and back, and tail, are of a beautiful black, gloſſed with green, and blue, and purple; his breaſt, and part of his wings, are white; and his tail is very long.

There are very beautiful Magpies in Italy and China, but they are not quite like this that is found in England.

The Magpie is eaſily made tame. Mr. Buffon knew one that paſſed both the day and the night with a number of cats, and made them all afraid of him.

It very ſoon learns to talk, and to imitate the voice of other animals. I have read of one that could counterfeit the cry of a calf, of a kid, and a ſheep, and even the pipe of a ſhepherd; another that could repeat a flouriſh of trumpets.

Plutarch (who has written the lives of many of the great men of Greece and of Rome) ſays, that a Magpie, who was very fond of learning to imitate almoſt every thing, having heard a flouriſh of trumpets, became ſilent all on a ſudden. This very much ſurpriſed thoſe who were uſed to hear him almoſt always talk; but they were ſtill more ſurpriſed ſoon after, when he imitated, very exactly, the ſound which the trumpets had made, with all the notes and changes.

The Magpie is a very reſtleſs bird; when it is on the ground it is continually hopping about, and moving its tail.

No bird is more attentive to its young, for if any bird of prey flies near its neſt, the Magpie attacks him with great courage, and drives him away.

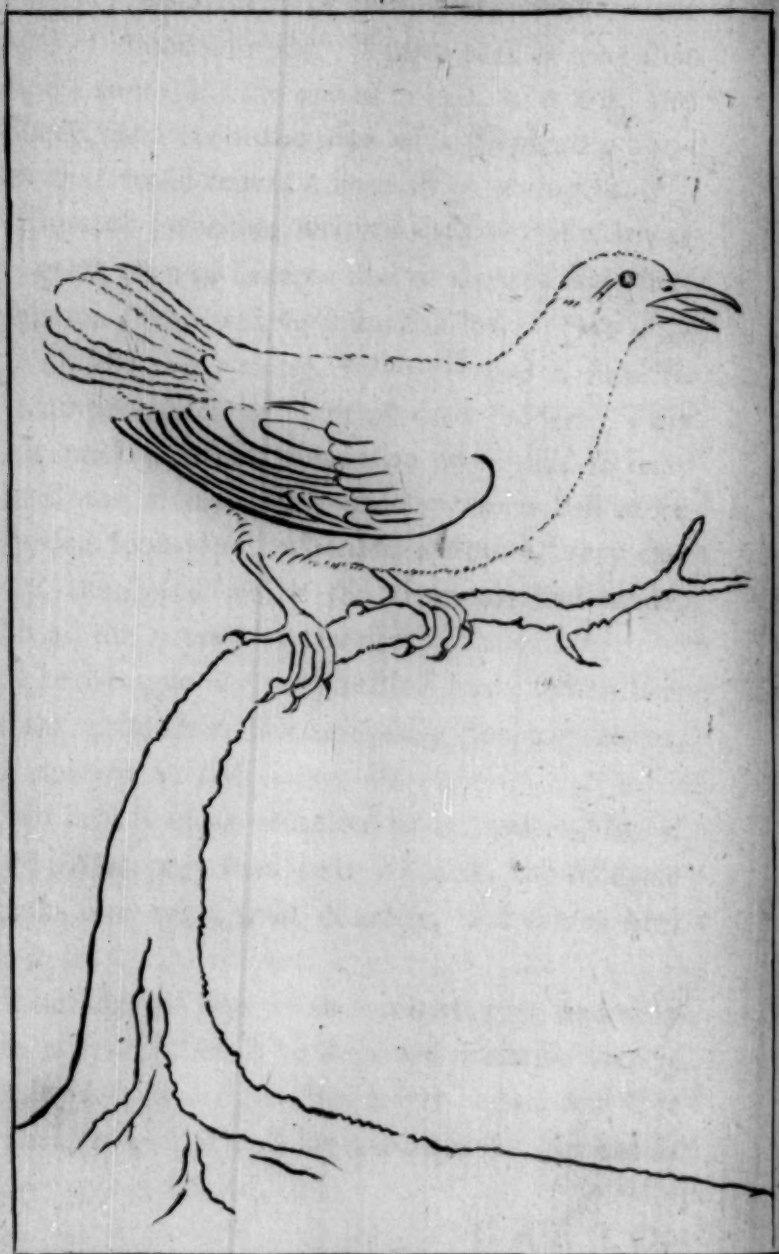
The Magpie lays ſeven or eight eggs, and only once a year, unleſs it be deprived of them, then it will lay a ſecond time, but fewer eggs; and if it be then robbed, it will lay a third time, but not ſo many eggs as before.

CARYO-

B L

ORDER 2

Genus 10 Caryocatactes.



NUTCRACKER.

Published Oct.r 2.d 1786 by Jos. Johnson St Pauls Church Yard London.

CARYOCATACTES.

THE NUTCRACKER,

IS found moſtly in mountainous countries, and lives upon nuts, acorns, wild berries, and pine kernels, and on inſects.

There are two kinds—one of them breaks the nuts, the other makes a hole in them.

They both hoard their food, like Jays and Magpies.

Their plumage is very remarkable, from the white triangular ſpots every where but on the head.

They are found in Savoy, in Switzerland, and in Auſtria; eſpecially upon thoſe mountains which are covered with firs.

A great flight of Nutcrackers came one year into France, ſo tired, that they ſuffered themſelves to be beat down with ſticks, and to be caught by the hand.

They bore holes in trees like Woodpeckers; they make their neſts there, and ſome of the feathers in the middle of their tails are very much worn, as if they uſed them to help their climbing upon the ſides of trees.

GRACULUS.

THE CORNISH CHOUGH,

HAS a crooked bill, red and long; its legs are red, and the reſt of the body black. It frequents rocks, caſtles, and ruins by the ſea ſide. Its voice is like that of the Jackdaw: it is often kept in gardens to deſtroy worms and inſects. It is found in Cornwall, and in the mountains of Switzerland.

GENUS II. CORRACIAS.

THE ROLLER.

His beak is cultrated, or ſharp at the edges, like the Crow's; crooked at the point, and without feathers at the baſe. Noſtrils narrow and naked.

The tongue is cartilaginous, (or griſly,) and bifid, (that is, divided at the end.)

The feet formed for walking or hopping, the toes being placed three before and one behind.

THERE are many kinds of Rollers: ſome live in Europe, and feed upon beetles, frogs, acorns, and grain.

Some

Some live in Asia, and some in Africa. Their feathers are beautiful shades of blue, and green, and white.

They generally build their nests in birch-trees; but in those countries where there are none of these trees, as in the island of Malta, and Africa, they are said to make their nests in the ground.

Genus 12. ORIOLUS.

The ORIOLE.

The bill is conic, convex, very sharp, and strait; the upper mandible slightly margined, and a little longer.

The tongue sharp and bifid.

The feet formed for walking or hopping, or three toes before and one behind.

THERE are a great many birds of this kind. They live in Europe, Asia, Africa, and America, but mostly in warm climates.

The Galbula, or Golden Thrush, which is one of them, lives on insects and berries, and makes a nest in the form of a pitcher or jug, of leaves, and at the end of the smaller branches of trees.

Some of these birds have a stripe, which reaches from one eye to the other, round the back part of the head.

The black and yellow Daw, another bird of this kind, which lives in South America, builds a neſt in the form of an alembic; which is made very curiouſly of hair and fibres, woven together.

This neſt is hung at the end of a very ſmall branch; and 400 of them have been ſeen on one tree.

The neſt of the Baltimore is hung like a purſe, from a forked branch of a tree.

The Banana ſews his neſt very curiouſly to the under part of a leaf of the banana-tree, which ſerves as a covering, and is at the ſame time a part of the neſt. Its form is very ſingular, for it is like a quarter of an orange.

In the countries where they live there are a great many monkies and ſerpents; and they build their neſts in this manner, at the end of a very ſmall branch, that they may be ſecure from their attempts; for monkies and ſerpents are very fond of eating birds.

Albin ſays, that the Banana birds will ſometimes join together to attack a larger bird; and after they have killed him, will devour him, every one eating in his turn without quarrelling.

The Icterus Pterophœnicus, or Red-winged Starlings, fly together in great flocks; and ſometimes join with other birds, and deſtroy whole fields

fields of maize or Indian corn. They breed in Carolina and Virginia, always among ruſhes. They faſten together the tops of the ruſhes, as a canopy or covering to their neſts, which they build under them, and at ſo juſt a height, as always to be above the flowing of the water.

GENUS 13. GRACULA.

THE GRAKLE.

The beak is convex and compreſſed; rather bare at the baſe. Noſtrils ſmall.

The tongue ſtrait, pointed, and fleſhy.

The feet formed for walking or hopping, three toes before and one behind.

THE Minos are birds of this kind; they come from the iſland of Borneo, and from other iſlands in Aſia. They whiſtle, and talk, and ſing, better than the Parrot. They are of a blackiſh and violet colour; and there is a piece of yellow ſkin behind their head which reaches on each ſide to the eye. The beak is red, and yellow at the point.

Another bird of this kind is found in the Philipine iſlands, in Aſia. The ſides of its head are

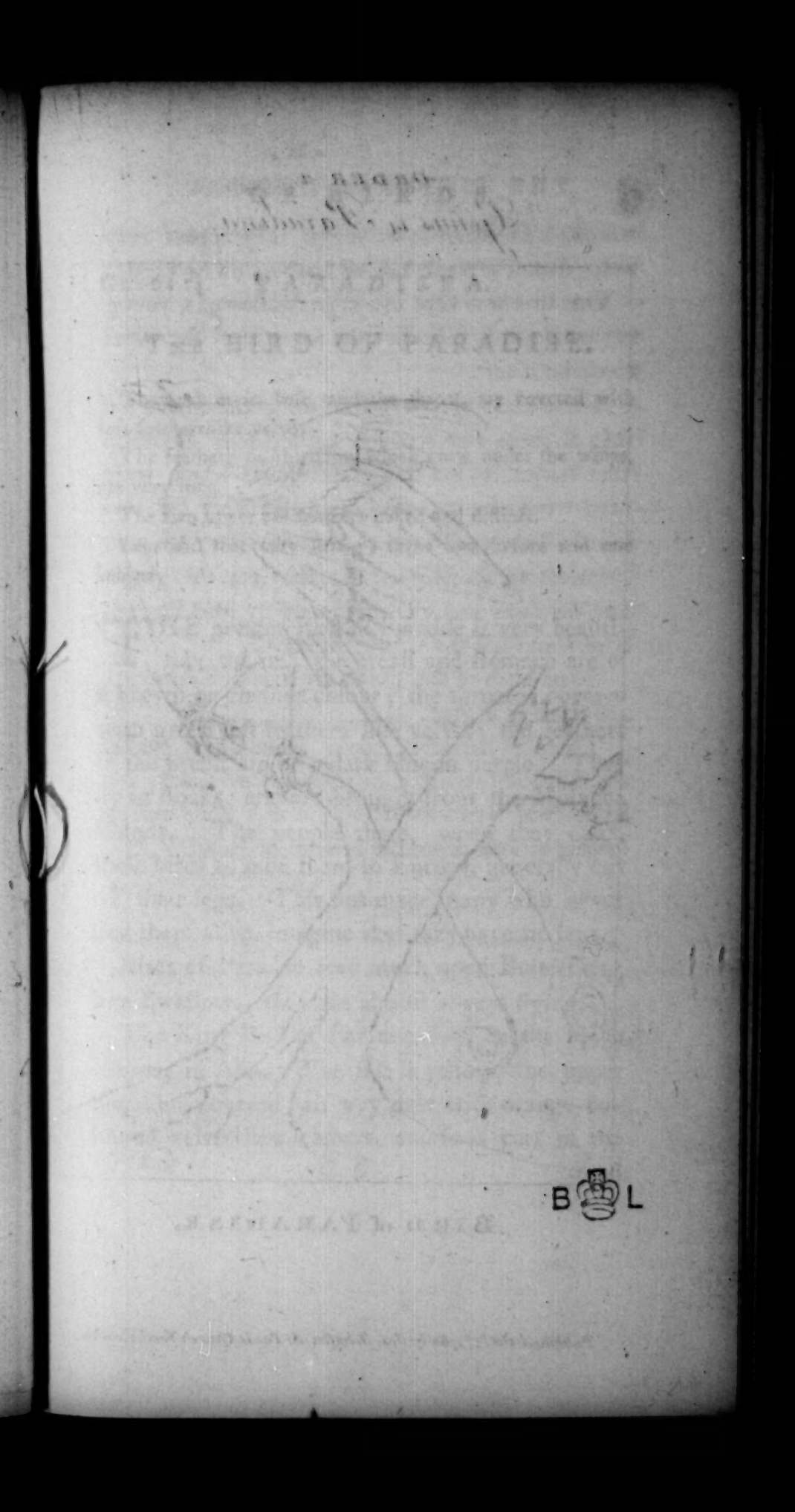
naked; and when it is angry, they appear very red. It has a black line of feathers on its head.

One that was kept in a cage ſwallowed a young rat whole, it firſt bruiſed the rat againſt the wires to make it ſoft.

Theſe birds are very fond of graſshoppers; a pair of them was ſent for to the Iſle of Bourbon near Africa, to eat the graſshoppers which were very troubleſome; they increaſed very faſt and killed all the graſshoppers, and now they are very troubleſome themſelves, for they eat the grapes and the dates and the corn, and fly into Pigeon-houſes and kill the young Pigeons.

Some birds of this genus are found in America, and ſome in Egypt.

There is one that comes from China, called the Chineſe Starling; its feathers are black, but its bill and legs are yellow; and a little tuft of feathers grows from the bottom of its bill.



ORDER 2

Genus 14 Paradisea.

BIRD of PARADISE.

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GENUS 14. PARADISEA.

THE BIRD OF PARADISE.

The beak at its baſe, and the throat, are covered with ſoft feathers like velvet.

The feathers on the ſides, which grow under the wings, are very long.

The two upper tail feathers naked and diſtinct.

Legs and feet very ſtrong; three toes before and one behind.

THE greater Bird of Paradiſe is very beautiful; the tail, the breaſt and ſtomach are of a brown or cheſnut colour; the throat is covered with green ſoft feathers like velvet; the feathers of the breaſt are of a dark blueiſh purple. They fly in flocks, and are brought from the Molucca Iſlands. The people there, when they catch theſe birds to ſend them to Europe, generally cut off their legs. This has made many who never ſaw them alive, imagine that they have no legs.

Birds of Paradiſe feed much upon Butterflies; like Swallows, they are almoſt always flying.

The King Bird of Paradiſe lives in the Spice Iſlands, in Aſia. The bill is yellow, the upper mandible covered half way over with orange-coloured velvet-like feathers, and ſo is part of the

head and throat; its tail is very ſhort, and the wings reach beyond it; but from the upper part of the tail there are two ſtems of feathers about ſix inches long, naked, except towards the end, where they have webs on one ſide, and curl round. Its head and back are red; under each wing it has a remarkable tuft of ſeven or eight feathers tipt with green; and on its breaſt there is a creſcent of feathers of a dark gloſſy green.

Birds of Paradiſe are ſo extremely light, from the great quantity of their feathers, that their flight is liable to be affected by the winds; on this account, perhaps, they chuſe for their abode thoſe countries in which high winds are not frequent.

GENUS 15. TROGON.

THE CURUCUI, OR COUROUCOU.

The beak is ſhorter than the head, compreſſed, hooked, and on the margin, or edge, a little waved, ſurrounded at the baſe with fringe-like feathers.

The toes placed two before and two behind, for climbing.

The legs are ſhort and weak, and covered with feathers or down.

THEY are found in South America. One of this kind has a yellow bill, ſurrounded with ſtiff black feathers that point forward; they have

have black feathers round their eyes; the throat, the top of the head, and back, is of a beautiful green, gloſſed with blue and gold; the forepart of the neck a blue green; the wings are aſh-coloured; the breaſt and ſtomach of a beautiful orange; the ſix middle feathers of the tail are green, tipt with black; the other feathers white, ſtriped acroſs with black, except at the top, where they are white.

Their note is melancholy. They retire into thick foreſts, and lay in hollow trees upon decayed wood, which they break very ſmall with their bills. They lay three or four white eggs, and their neſt is very ſoft. The male bird brings food to the female whilſt ſhe ſits, and ſings, perched on a neighbouring bough. They feed their young with worms, caterpillars, and inſects.

Rats, and ſnakes, and birds of prey often devour them. They are about the ſize of a pigeon. They do not fly much, but ſit on the ſame bough for the greateſt part of the day. Their feathers eaſily fall off. They are beautiful. The Mexicans uſe them in making pictures and other ornaments, which are very pleaſing.

GENUS 16. BUCCO.

THE TAMATIA, OR BARBET.

The beak is cultrated, compreſſed at the ſides, bent at the point, with a margin on each ſide.

The gape of the beak extending to below the eyes.

The noſtrils covered with ſtiff reclining feathers.

The toes two before and two behind, for climbing.

TAMATIAS live in the moſt ſolitary parts of foreſts; they are never ſeen in flocks; their flight is heavy and ſhort; they perch moſt on the buſhieſt trees, and remain upon them a long time without changing place; their head is large in proportion to the body, and the tail ſhort. They often draw their heads inwards towards the ſhoulders, and ſeem rather melancholy. Their bodies are as broad as they are long. They feed moſtly on inſects, and are found both in Africa and America.

One of the Tamatias has a yellow ſtripe acroſs the back.

The Tamatias are ſo indolent, that you may ſhoot at them more than once, before they will fly from the branch where they are perched.

GENUS

GENUS 17. CUCULUS.

THE CUCKOO.

The beak is weak and bending.
The noſtrils a little prominent (or jutting out,) and margined, (or with a rim.)
The tongue flatted, ſtrait, and in the form of an arrow.
The toes two before and two behind, for climbing.
Ten feathers in the tail, which is in the form of a wedge.

THE Cuckoo is rather ſmaller than a pigeon; he is a bird of paſſage; he makes his appearance early in the ſpring, and ſtays with us but a ſhort time. If the ſeaſon be mild, he comes the ſooner. The Cuckoo is ſilent for ſome time after his firſt coming. His note is cuckoo, from which he takes his name; and he repeats it in the morning, in the ſpring, from a withered bough, on which he is generally perched.

Unlike the generality of birds, Cuckoos do not pair; it does not appear neceſſary, becauſe they neither hatch nor rear their young. When a female appears on the wing, ſhe is often attended by two or three males, who ſeem to be earneſtly contending for her. From the time of her appearance, till after the middle of ſummer, the

the neſts of the birds ſelected to receive her eggs are to be found in great abundance; but, like the other migrating birds, ſhe does not begin to lay till ſome weeks after her arrival.

The Cuckoo makes no neſt of her own, for as ſhe is a bird of paſſage, and leaves this country the beginning of July, inſtinct impels her to depoſit her eggs in the neſts of other little birds, particularly in that of the hedge-ſparrow, who rears them after her departure.

When the young Cuckoo is hatched it throws all the eggs, and even its fellow-neſtlings, out of the neſt. The mode of doing this is very curious. The little animal with the aſſiſtance of its rump and wings, contrives to get the bird upon its back, and making a reſting place for the burden by elevating its elbows, clambers backward with it up the ſide of the neſt till it reaches the top, where taking breath for a moment, it throws off its load with a jerk. It remains in this ſituation a ſhort time, feeling about with the ends of its wings, as if to be certain whether the buſineſs was done properly, and then drops into the neſt again. It is wonderful to ſee the great exertions of the young Cuckoo, when it is two or three days old, if a bird be put into the neſt with it that is too weighty for it to liſt

out. In this ſtate it ſeems ever reſtleſs and uneaſy. But this diſpoſition for turning out its companions begins to decline from the time it is two or three till it is about twelve days old, when it ceaſes. Its ſhape is well adapted for theſe purpoſes; for, different from other newly-hatched birds, its back is very broad, with a conſiderable depreſſion in the middle. This hollow ſeems formed by nature for the deſign of giving a more ſecure lodgement to the egg of the hedge-ſparrow, or its young one, when the young Cuckoo is employed in throwing either of them out of the neſt. When it is about twelve days old this hollow is quite filled up, and then the back aſſumes the ſhape of neſtling birds in general.

June 27, 1787. Two Cuckoos and a hedge-ſparrow were hatched in the ſame neſt this morning; one hedge-ſparrow's egg remained unhatched. In a few hours after, a conteſt began between the Cuckoos for the poſſeſſion of the neſt, which continued undetermined till the next afternoon; when one of them, which was ſomewhat ſuperior in ſize, turned out the other, together with the young hedge-ſparrow and the unhatched egg. This conteſt was very remarkable. The combatants alternately appeared to have the advantage, as each carried the other ſeveral times nearly to the top of the neſt, and then ſunk down

again,

again, oppreſſed by the weight of its burden; till at length, after various efforts, the ſtrongeſt prevailed, and was afterwards brought up by the hedge-ſparrows.

The circumſtance of the young Cuckoo being deſtined by nature to throw out the hedge-ſparrows, points out why the parent Cuckoo drops her egg in the neſts of ſuch ſmall birds. If ſhe were to do this in the neſt of a bird which produced a large neſtling, the young Cuckoo would probably find it impoſſible to take poſſeſſion of the neſt, as its exertions would be unequal to the labour of turning out the young birds. Beſides, though many of the larger birds might have fed the neſtling Cuckoo very properly, had it been committed to their charge, yet they could not have ſuffered ſuch a great number of their own young to have been ſacrificed as the ſmaller ones, which are ſo much more abundant; for we have every reaſon to ſuppoſe that the number of neſtlings deſtroyed by the Cuckoo muſt be very large.

Here it may be remarked, that though nature permits the young Cuckoo to make this great waſte, yet the animals thus deſtroyed are not thrown away or rendered uſeleſs. At the ſeaſon when this happens, great numbers of tender quadrupeds and reptiles are ſeeking proviſion; and

if

if they find the callow neſtlings which have fallen victims to the young Cuckoo they are furniſhed with food well adapted to their peculiar ſtate. *

Cuckoos feed upon inſects and birds eggs; but never upon birds; indeed, they are fearful, and fly from the ſmall birds, who continually purſue and teize them; but the bird called the Wry-Neck is their chief tormentor, for he is ever following them, and warning the little birds of their approach.

On many plants in the ſummer, a froth is frequently found, which ſome people have fancied to be the Cuckoo's ſpittle, but this is quite a miſtake; for this froth comes from an inſect called the Cicada, and is intended as a ſhelter for its larva (or the young Cicadas in their grub ſtate.)

Cuckoos moult or ſhed their feathers very late; and it is ſaid they have ſometimes been found in the winter, in hollow trees, without any feathers, and in appearance much like a toad.

Cuckoos, after they are hatched, cannot take care of themſelves as ſoon as many little birds, and they continue to follow the bird in whoſe

* The preceding account is gathered from Mr. Jenner's Letter to John Hunter, Eſq. inſerted in the Phil. Tran. Vol. 78. Part 2.

neſt

neſt they were hatched for ſupport, much longer than her own young ones would have looked for aſſiſtance from her.

There ſeems to be no fixed time for the departure of the young Cuckoos: they probably go as ſoon as they are able to take care of themſelves. They become nearly equal in ſize and growth of plumage to the old Cuckoos; yet never acquire the well-known note during their ſtay in this country.

Cuckoos ſeem to have an averſion to water, and are ſeldom, if ever, ſeen to drink.

There are many kinds of Cuckoos, and they live in different parts of the world; but the Cuculus Indicator of Africa, is perhaps one of the moſt wonderful. In the morning and evening his ſhrill cry, chir, chir, is frequently heard. He ſeems to call thoſe who are ſeeking for honey in the wood. They anſwer his call, and come nearer to him; as ſoon as he ſees them he flies a little way before, and at laſt alights upon the hollow tree, in which the bees have made their hive. If the hunters do not immediately reach the tree he returns to meet them, redoubles his cries, goes back again to the tree, and perches upon it. He ſeems to do every thing in his power to point out to them the treaſure he has found. Perhaps without the help of man, he might not be able to procure

cure it for himſelf. Whilſt they are taking the honey, he watches them attentively in a neighbouring buſh, waiting for his ſhare of the ſpoil; and they always give him a part, that he may ſhew them to other trees where there are hives.

GENUS 18. YUNX.

THE WRY-NECK.

The beak is ſmooth and pointed, weak and a little bowed.
The noſtrils depreſſed, hollow, and conſpicuous.
The tongue ſmooth, long-ſhaped like a worm, and ending in a ſharp bony point.
Ten flexible feathers in the tail.
Two toes before, and two behind, for climbing.

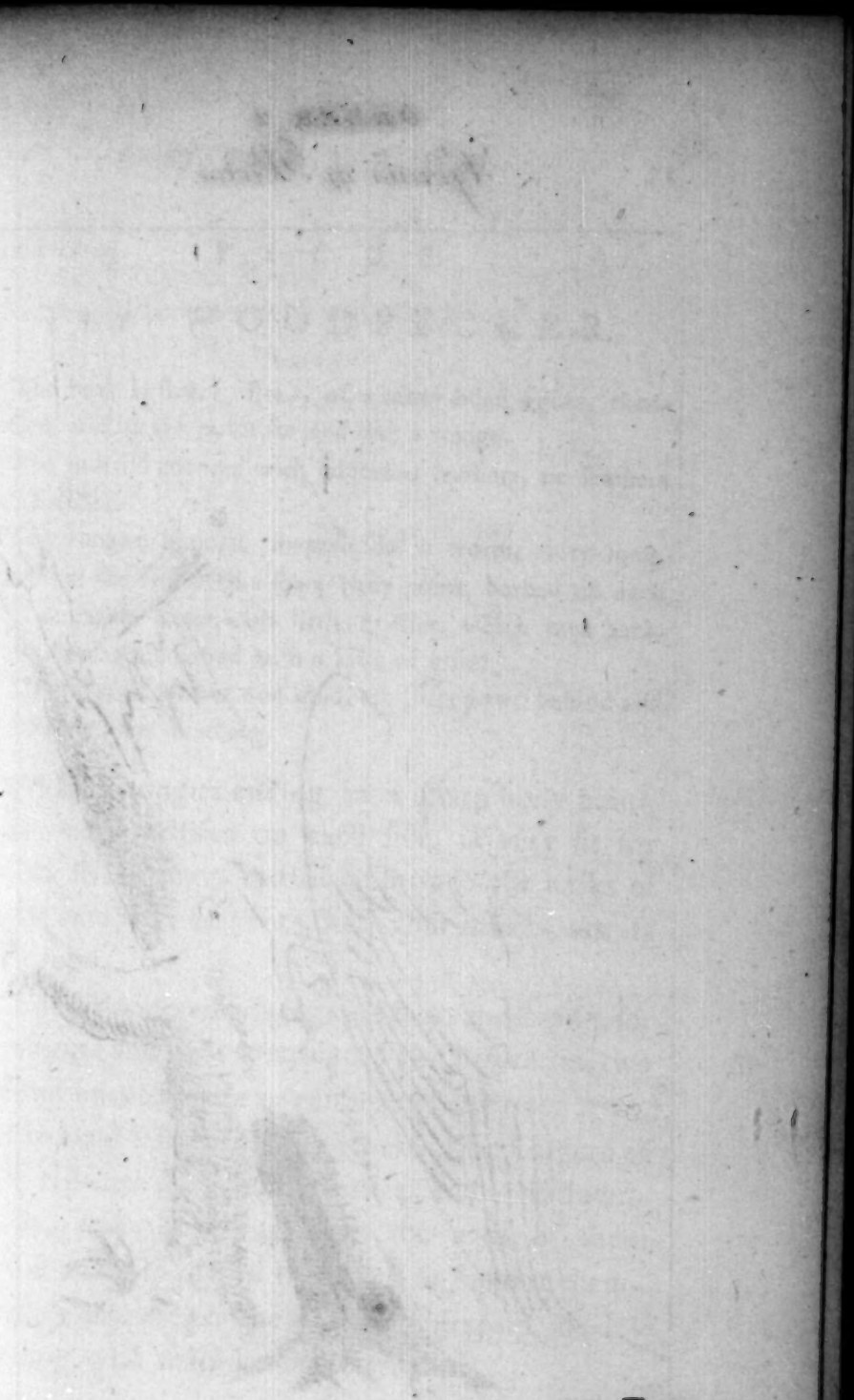
THE Wry-Neck feeds upon inſects, which it pierces and takes with its tongue. The tongue, like that of the Woodpecker, is covered with a kind of glue. Its colours are not very beautiful, but it is ſtreaked in the moſt delicate manner; a number of black ſtrokes divide the head and the back; and the ſides of the head and neck are beautifully marked with fine lines of black, and of a reddiſh brown.

It

It is a bird of paſſage, but generally viſits us before the Cuckoo. It has a ſtrange way of turning its head back to its ſhoulders, eſpecially when frightened, and this is the reaſon why it is called the Wry-Neck. This motion is generally not ſudden, but gradual, like the Caterpillars when they are going to ſpin, and with his eyes half ſhut. One of theſe birds was confined in a cage; he always turned to face thoſe who came near him, and raiſed himſelf upon his ſpurs, and coming forward with his tail ſpread, at the ſame time raiſed the feathers of his head; then he withdrew haſtily, and ſtruck his beak againſt the bottom of the cage, and this he did frequently. The young Wry-Necks begin to turn their heads about in the neſt. The Wry-Neck builds in hollow trees, and generally lays nine eggs. He conſtantly follows the Cuckoo, and gives the little birds notice when the Hawk is coming. He lives very much in hollow trees, and feeds upon the inſects which he finds there; though ſome ſay, he takes all his food upon the ground. Though the Wry-Necks have two toes before and two behind, he does not run up the trunks of the trees like the Woodpecker.

He can raiſe the feathers of his head, and make a creſt like a Jay.

GENUS



B L

ORDER 2

Genus 19 Picus.

WOOD PECKER.

Published Oct.r 2.d 1786 by Jas. Johnson St. Pauls Church Yard London.

GENUS 19. PICUS.

THE WOODPECKER.

The beak is ſtrong, ſtrait, of a many-ſided figure, channelled, and at the point formed like a wedge.

The noſtrils covered with ſetaceous feathers, or feathers like briſtles.

The tongue ſmooth, ſhaped like a worm, very long, armed at the end with a ſharp bony point, barbed on each ſide, or rather beſet with little briſtles, which turn backwards, and are covered with a kind of glue.

The toes, in all but one kind, are placed two behind and two before, for climbing.

THE tongue ending in a ſharp bony point, with briſtles on each ſide, is very fit for taking flies or ants out of hollows in the barks of trees; and flies and ants, and other inſects, are its only food.

The Woodpecker's legs are ſhort and ſtrong, for climbing; and their toes, placed two before and two behind, enables them to run up and down the trees, and to hold faſt by the branches. The feathers of their tails are ſtiff, ſharp-pointed, and bend downwards, and they bear with the ends of them againſt the ſide of the tree, and ſo ſupport themſelves, either when they are climbing up, or deſcending with their heads downwards.

When a Woodpecker has found an old decayed tree, in which there are worms, or ants eggs, or inſects, he fixes his ſtrong claws in the bark, and leaning on the ſtiff feathers of the tail, he begins to bore with his bill; and, when he has opened a way into their dwelling, he feaſts upon the poor inſects, darting his tongue through them, and drawing them into his beak.

Sometimes, when he finds an ant-hill on the ground, he pecks with his bill and diſturbs the ants, he then thruſts out his long red tongue, and lays it on the ground: the ants perhaps think it to be a worm, (for it is very much like one) and as they are very fond of worms, they ſettle upon it in great numbers; the Woodpecker then draws in his tongue, and eats them all.

The Woodpecker's bill is very ſtrong, and of a proper form for boring wood. He makes his neſt in a hollow tree, and bores a round hole in the ſide, at which he gets in: but he is very nice in his choice, and as he can eaſily make theſe holes, he ſometimes leaves a great many before he fixes upon one. Thoſe that he has left, other birds that cannot bore ſo well, make their neſts in, ſuch as the Jay and the Starling. Woodpeckers do much miſchief in woods, by boring the trees, which afterwards decay, and ſometimes by ſtripping the bark.

The

The flight of the Woodpecker is very irregular; never in a ſtraight line, but always up and down. Woodpeckers lay about five eggs, greeniſh, with black ſpots.

There is at Saint Domingo, or Hiſpaniola, (an iſland in the Weſt-Indies) a bird of the Woodpecker kind, called the Carpenter. He ſpoils many of the palm-trees, for he bores them in many places, and weakens them ſo much, that they are often blown down by the wind. This bird is not much larger than a Lark; his bill is about an inch in length, and ſo ſtrong, that in a day he can bore a palm-tree to the center. The palm-tree is ſo hard, that it turns the edges of the beſt iron tools.

There is one American Woodpecker which has a bill as white as ivory. Another kind which is found in Brazil, is as large as a Pigeon; he has a ſcarlet head, and a creſt of ſcarlet feathers which reach to his back.

There is one kind of Woodpecker that differs from all the reſt; it has but three toes, two before and one behind. It is found in Sweden, and Siberia which is in Aſia, and at Hudſon's Bay in America, and is not much larger than a Linnet.

GENUS 20. SITTA.

THE NUTHATCH.

The beak is awl-ſhaped, ſmooth, ſtrait, the upper mandible rather longer and black, and compreſſed at the point; the lower mandible white.

The tongue ſhort, horny at the end, and jagged.

The noſtrils covered with briſtles.

The feathers of the tail are ſtiff.

The feet formed for walking or hopping, that is, three toes before and one behind.

THE Nuthatch runs up and down the bodies of trees, and feeds upon inſects and nut-kernels.

He is a very wiſe and careful bird, for he ſaves nuts for the winter; and when he has occaſion for them, he brings one at a time from his hoard, and places it in the chink of a tree, and ſtands above it with his head downwards; then he ſtrikes the nut with his bill, with all his ſtrength, and breaks it, and catches up the kernel before it can fall to the ground.

The female makes her neſt in hollow trees, and if the hole be too large, ſhe ſtops up part of it with clay. She is very fond of her young ones, and will ſuffer her feathers to be pulled off, rather than

than forſake them. She never leaves them to feed herſelf, but the male bird brings beetles, ants, and caterpillars, for her to eat while ſhe is ſitting.

GENUS 21. TODUS.

THE TODY.

The beak is awl-ſhaped, a little flattened, blunt, ſtrait, and with ſpreading briſtles at the baſe. The noſtrils are ſmall and oval.

Feet like the King Fiſher's, the middle toe joined to the outer toe to the third joint.

THE male bird is of a light blue on the upper part of the body, and white under the ſtomach; the throat and ſides of a roſe-colour.

The females make their neſts in dry earth ſometimes, moſtly in ſand, and always in the ground; they dig it with their feet and beak; and firſt they make a round hole, in which they put ſtraw, dry moſs, cotton, and feathers; the female lays four or five eggs.

They catch flies and other inſects with great addreſs and ſkill.

GENUS 22. ALCEDO.

THE KING-FISHER's

Bill is long, ſtrait, ſtrong, and trigonal, (that is to ſay, three-ſided.) Noſtrils ſmall.

The tongue fleſhy, ſhort, ſmooth, and ſharp-pointed.

In the feet of moſt, the three joints of the outer toe grow to the middle toe.

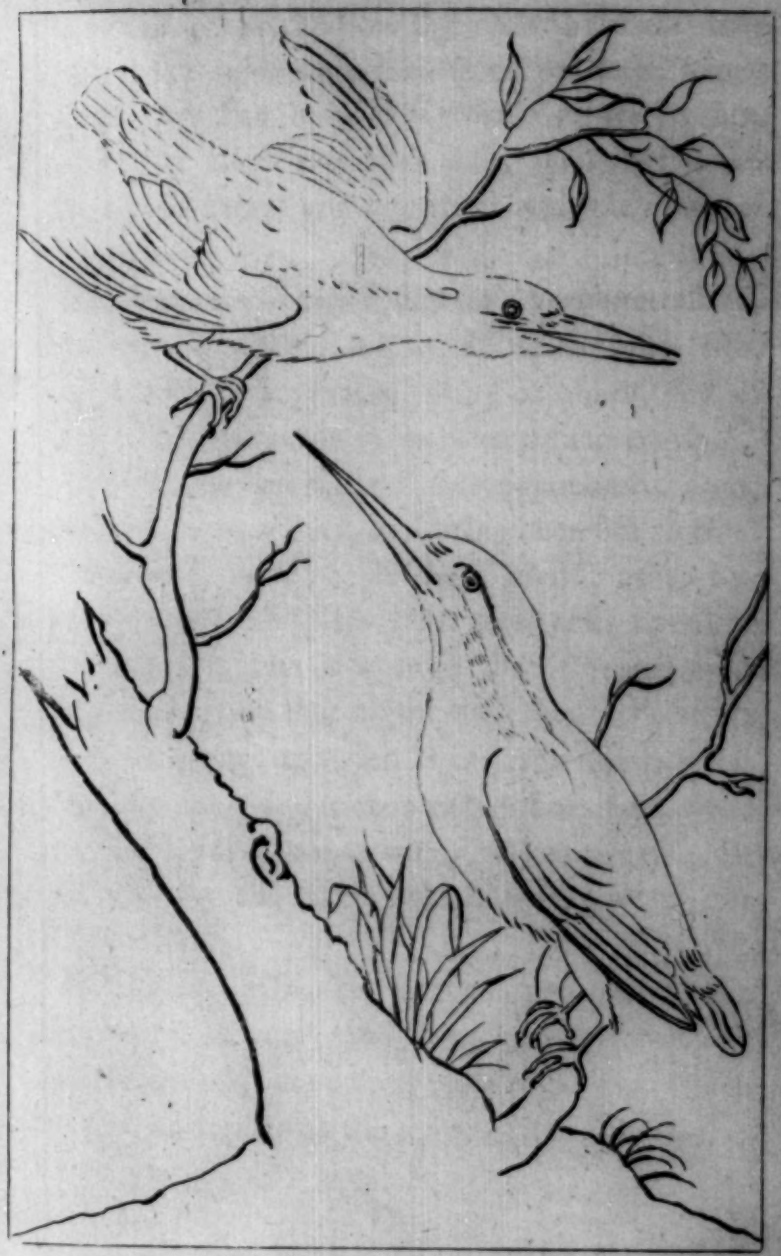
THERE are many kinds of King-Fiſhers, and they live in ſeveral parts of Europe, and in Bengal, on the banks of the river Ganges, and in Perſia: Bengal and Perſia are both in Aſia.

There are ſome kinds of King-Fiſhers in Egypt, which is in Africa; and ſome at Surinam, and other parts of America. The King-Fiſher is about the ſize of a Swallow, his bill is remarkably long, and his legs very ſmall. The colours of the Engliſh King-Fiſher are beautiful; the back, from the neck to the tail, is of an elegant bright and ſhining blue; the crown of the head is green and blue; the tail is ſhort, and of a rich deep blue.

He balances himſelf upon his wings above the water at a certain diſtance; and as ſoon as he ſees a little fiſh ſwimming near the top, he darts inſtantly upon it, and brings it up in his feet.

ORDER 2.

Genus 22 Alcedo



KING FISHER.

Published Oct.r 2.d 1786 by Jas. Johnson St. Pauls Church Yard London.

BL

The King-Fishers make their nests on the banks of rivers, and on the cliffs near the sea; they make holes more than three feet deep; sometimes they find holes ready made by water rats, which the water rats have left; then they make their nests there, and line them with the down of the willow.

Though the King-Fisher be a very pretty bird, his nest is dirty; for as he feeds upon fish, we find in it a great quantity of bones, and of scales, which makes it smell very disagreeably.

Whilst the hen King-Fisher sits upon her eggs, the cock is very busy, and brings her fish to eat.

Formerly some people were so silly as to believe, that these birds built their nests upon the sea, in the middle of winter; that it floated upon the surface; and that all the time they were sitting upon their eggs to hatch them, the weather was perfectly fine—and so they called those days, when nothing made them unhappy, Alcyon days; for Alcyon was the name which they gave to the King-Fisher.

The King-Fisher has a very large stomach, like other birds of prey; and like them, he throws up in little round pellets, those parts of his food which he cannot digest, as the scales of the fish, &c.

It is very ſtrange that a bird, whoſe wings are ſo ſmall in proportion, ſhould fly ſo ſwiftly; if a fiſh chance to fall out of his beak, from the branch upon which he is perched, he will ſometimes catch it before it reaches the water.

He darts down ſo rapidly, that his fall has been compared to the fall of lead.

In warmer climates there are many ſpecies of the King-Fiſher; here we have but one; yet he can bear the cold very well; for in the winter, he is ſeen ſometimes to plunge under the ice after his prey. Yet ſometimes they periſh in the winter.

GENUS 23. MEROPS.

The BEE EATER.

The beak is bowed, or bending; compreſſed and keel-ſhaped.

The tongue ſlender, and lacerated (or fringed) at the point, ending in two long threads.

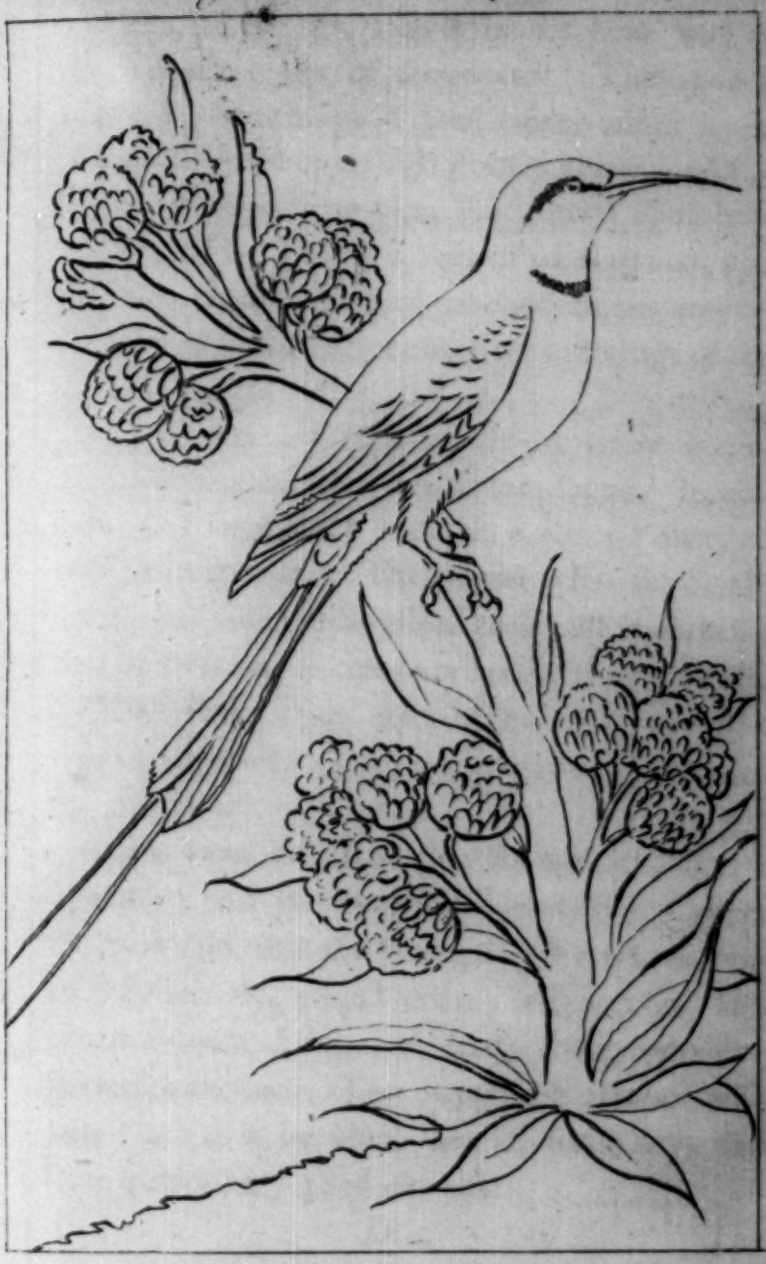
In the feet the three joints of the outer toe grow to the middle toe, as in the King-Fiſher's.

THE Bee Eater eats waſps, and graſshoppers, gnats, flies, bees, and other inſects, which he catches like the Swallow, as he flies. The children in the iſland of Candia (which is

in

ORDER 2

Genus 23 . Merops.



BEE EATER.

Publiſhed Oct.r 2.d 1786 by Jos. Johnſon St Pauls Church Yard London.

B L

in the Mediterranean Sea) catch him with a hook and line, in the air, almoſt in the ſame way as fiſh are taken out of the water. They put a crooked pin through a graſshopper whilſt he is alive; the graſshopper ſtill flutters about, and the Bee Eater perceiving him, darts down upon him and is taken. This is a very cruel diverſion, and certainly would not afford the children any amuſement, if they did but conſider the ſufferings of the graſshopper.

Bee Eaters are ſeen moſtly in warm countries; in England they are ſeldom found. In colours they very much reſemble a King-Fiſher, as well as in their feet. Their flight is like the Swallow's, and like the Swallow their tail is forked; two of their tail feathers are longer than the reſt.

They make their neſts in caverns, and line them with moſs. They are gregarious (that is to ſay, they flock together.)

Some have ſaid, that they fly with the breaſt upwards; but this may be a miſtake. Others too have ſaid, that the young Bee Eaters, as ſoon as they can fly, attend upon their parents, and procure them food, and ſerve them with the greateſt affection. This is perhaps another miſtake; but if it be true, they ſet little boys and little girls a very good example.

The fore part of the head is a beautiful ſea-green; the upper part reddiſh, tinged with green; the back part of the head and back a browniſh red; the breaſt and tail a greeniſh blue.

GENUS 24. UPUPA.

THE HOPPOE.

The beak is bowed, or bending, a little compreſſed; ſlender, with a furrow running along each ſide.

A very ſhort triangular tongue, blunt and ſtrait in moſt.

Feet formed for hopping or walking, three toes before and one behind.

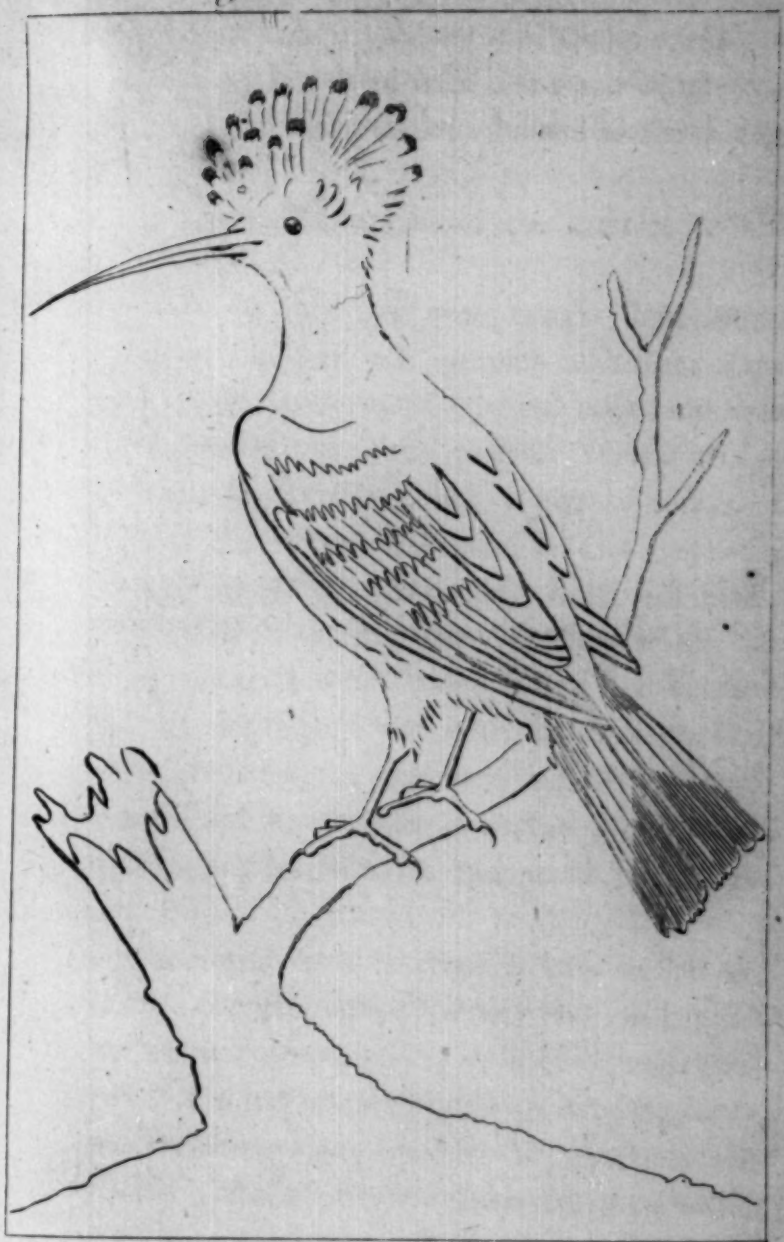
Ten feathers in its tail, and a creſt on its head, which it can fold back.

THE Hoppoe can raiſe or let fall his creſt when he chuſes; it begins at the baſe of his beak, and goes to the back part of his head. The feathers in the creſt are in a double row, and they are black and yellow.

In the middle of the tail is a white ſpot, like a new moon. The wings and tail are black, with bars of white. It lives on inſects, ſuch as ants, and beetles, and caterpillars. It is found in many

ORDER 2

Genus 24 Upupa.



HOPPOE.

Published Oct.r 2.d 1786 by Jos. Johnson St Pauls Church Yard London.

B L

many parts of Europe, and ſometimes in England: when it is frightened it raiſes its creſt.

The back is ſpotted with black and white; the legs are ſhort; the outer toe is fixed to the middle toe in part.

The natural ſituation of the creſt is to fall down backwards.

A Hoppoe that had been caught ſome time, was very fond of the woman who took care of it; he ſeemed never happy but when he was with her only. If ſtrangers came he was afraid, and raiſed his creſt. Though the windows of the houſe were often left open, he did not wiſh to make his eſcape. One day, however, being affrighted by ſomething new, he flew away; he did not go far, but not being able to find his way back, he went into the window of a convent which was left open, and there he died, becauſe they did not know what was his proper food. Hoppoes may be fed with raw meat, and eggs, and worms.

Its common food is thoſe inſects which are found on the ground or fly very low, as beetles, ants, worms, dragon-flies, wild bees, and caterpillars. He is generally found in marſhy places, where there are many inſects. When the waters of the Nile, after overflowing, are returning within

their banks, they leave great quantities of mud behind. When the ſun warms this mud it ſwarms with inſects; the Hoppoes then are found on its banks. They feed upon the inſects, and follow the waters as they retire.

At Grand Cairo (which is the capital of Egypt) there are many Hoppoes. They build their neſts on the tops or terraces of the houſes.

In Egypt they live together in little companies. In moſt other countries they go only in pairs. In Europe they are only birds of paſſage, and do not ſtay all winter.

Like Woodpeckers, they lay their eggs in the holes of trees. Their neſts are extremely dirty, for the little birds being ſunk down ſo low in the tree, they cannot throw out the dirt.

A Hoppoe that was given to a lady ſeemed very fond of hearing muſic, and whenever ſhe played, would place itſelf on or near her harpſichord.

The Egyptians ſay, that the young Hoppoes are very fond of their parents; that they warm them when they are old under their wings, and when they are moulting, help them to pull off their feathers.

In this perhaps the Egyptians may be miſtaken; but if it be true, they ſet us a good example, for we ought to be grateful to our parents who have been ſo careful of us.

GENUS

GENUS 25. CERTHIA.

THE CREEPER's

Bill is bowed, weak, and ſlender, a little triangular, (or three-ſided,) and pointed.

The tongue pointed, and griſtly at the end.

The feet formed for walking or hopping, or three toes before and one behind.

THE head, back, and wings are of a duſky red, or browniſh colour; the throat and breaſt white; and the back and wings brown; the legs are ſhort.

The tail is long for the ſize of the bird, and very proper to aſſiſt him in climbing.

The tongue is not longer than the bill, but it is armed with a bony point.

The toes and claws are very long. He creeps up and down trees in ſearch of inſects to feed upon. Creepers breed in hollow trees, and ſome ſay, lay twenty eggs; but M. Buffon tells us, that they never lay more than ſeven. They have three toes before and one behind, and they can run not only up and down and round the tree, but under the branches, with their backs downwards.

Their

Their beaks are not ſtrong enough to ſtrike the bark to frighten the inſects, ſo they prey upon thoſe which they find upon moſs and bark, and ſometimes follow Woodpeckers, to catch ſome of thoſe inſects which they have diſturbed.

As Creepers live only on inſects, they are found in greateſt numbers in warm countries, where inſects moſt abound.

They ſeem ſometimes rather larger than they really are, becauſe their feathers do not always lie ſmooth, but often ſtand upright.

There is one kind of Creeper that frequents church-yards, and lays its eggs (when it has the opportunity) in human ſkulls.

There are Creepers in all warm climates, both in Europe and America; their plumage is very beautiful.

One kind, called the Angala, makes its neſt of the down of plants. It is frequently hunted by a ſpider nearly as large as itſelf, and very fierce, who often ſeizes the young and ſucks their blood.

B L

ORDER 2

Genus 26 Trochillus.

HUMMING BIRD.

Published Oct.r 2.d 1786 by Jos. Johnson St Pauls Church Yard London.

GENUS 26. TROCHILLUS.

THE HUMMING BIRD.

The beak is in the ſhape of an awl, but as fine almoſt as a thread; it is a little bent, tubulated, or trumpet-ſhaped at the end, longer than the head, and the upper mandible ſheathes the lower.

The tongue is thread ſhaped, tubulous, with two united threads, but divided at the point.

The feet formed for hopping or walking.

There are ten feathers in the tail.

THE Humming Bird is the ſmalleſt of all birds. There are ſeveral kinds, from nearly the ſize of a Wren to the ſize of a Humble Bee.

They only live in warm countries, in the Eaſt-Indies and in America (where flowers are conſtantly growing;) their colours are more beautiful than can well be imagined, and very brilliant or ſhining; many ſeem ſpangled with gold and precious ſtones, and ſome have little creſts on their heads.

As ſoon as the ſun riſes the Humming Birds of different kinds flutter about the flowers, without fixing upon them; their wings move very quickly, and are conſtantly in motion.

They

They fly like butterflies from flower to flower, and with their little tongues (which are like a tube or pipe, and forked at the end) they ſuck the honey, and that is what they live upon.

Their neſts are very curious. They generally hang from the end of a branch of an orange or of a citron-tree. The hen bird is buſy in building it, whilſt the cock goes to fetch cotton, and moſs, and the fineſt graſs. It is about as large as half an apricot, and warmly lined with cotton; the outſide is the bark of gum-trees glued together. They lay two little eggs about the ſize of peas, and the cock and hen ſit by turns; but the hen only leaves the eggs a little while in the morning, to get ſome honey when the dew is on the flowers. The little ones are hatched in twelve days, and at firſt are no larger than a great blue fly.

There was a gentleman in America who found a neſt of little Humming Birds (or Colibris) in a ſhed, near his houſe: he put them into a cage, and placed it in his chamber window. The old birds came to feed them every hour in the day; and they ſoon became ſo tame, as to live from choice almoſt conſtantly in the room with their young ones.

They frequently came and ſettled upon his hand, and he fed them with wine and biſcuit and ſugar.

ſugar. They flew into and out of the chamber when they wiſhed, but they were always attentive to the gentleman's voice, and came whenever he called them.

One night, unfortunately, he forgot to hang up their cage, and the rats came and devoured them. It was a great pity that the gentleman ſhould have been ſo careleſs. It is very thoughtleſs to catch birds, and to impriſon them in a little cage, and to prevent them from flying about as they like in the open air, and from hopping about from bough to bough, and from ſinging to one another, and from enjoying themſelves: but to put them firſt into ſo ſmall a priſon as a little cage, where they have no room to fly, and can only get what we give them, and cannot eſcape from cats or rats, that would hurt them, and then to neglect them, is very cruel indeed.

The Indians frequently dry Humming Birds, and wear them as ornaments. The Peruvians make curious pictures of their feathers.

Humming Birds have great courage; they will frequently attack birds twenty times as large as themſelves, and letting themſelves be carried along by them as they fly, ſtill continue to peck them.

There

There are two kinds of birds that are called Humming Birds; but they differ in this, the beak of the real Humming Bird is ſtrait, that of the Colibri, or the ſecond kind, a little crooked, and its body more taper.

All the birds we have been reading of, ſince the Butcher Bird, that is to ſay, the Parrots, the Toucan, the Indian Raven, the Beef-eater, the Ani, the Corvi, ſuch as the Raven, Crow, Rook, Royſton Crow, Jackdaw, Jay, Magpie, Nutcracker, and Corniſh Chough. The Roller, the Oriolus, the Grakle, the Bird of Paradiſe, the Curucui, the Cuckoo, the Wryneck, the Woodpecker, the Nuthatch, the Tody, the King Fiſher, the Bee eater, the Hoppoe, the Creeper, and the Humming Bird. Theſe are all of the Pie kind, becauſe their beaks are compreſſed and convex on the back, like a wedge, and as if intended for cleaving.

Their legs ſhort, and rather ſtrong.

Their fleſh tough, and not good for food.

They feed on berries, inſects, and carrion, and a variety of things.

They make their neſts chiefly in trees, the male bird feeding the female whilſt ſhe ſits.

They pair.

That

That great Being, who created all things, has given every animal the means of procuring food, and of taking care of itſelf. The more we know of his works, the more we may admire his wiſdom and goodneſs.

The parrots climb from bough to bough, for they are too heavy to hop; therefore, that good Being has given them very ſtrong toes; and one toe is moveable, ſo that they can turn it before or behind as they pleaſe, and can graſp the boughs very faſt, or hold their food in one foot, whilſt they ſtand on the other. Their beaks too are hooked, which is of great uſe when they climb.

The Toucan and the Indian Raven have both very large beaks, but that they may not be a burden, they are in both very light. Toucans live in thoſe countries where there are a great many Monkies; now Monkies are very fond of catching and eating their young: ſo that wiſe Being has given them very large beaks to frighten the Monkies away as they ſit upon their neſts.

We find too, that moſt animals, whilſt they are providing for themſelves, are at the ſame time of uſe to ſome other part of the creation.

The Beef-eater and Ani feed upon the inſects that breed under the ſkin of cows, and other cattle.

tle.—These insects would be very painful to them, when they increased to great numbers.

Ravens and Crows live upon carrion, that is to say, upon dead carcasses, which men do not eat. These carcasses would soon smell disagreeably, and in hot countries infect the air, and perhaps make the inhabitants die, if they were not devoured by the Ravens and Crows.

We ought to thank that good Being too, for having taught the Rooks to feed upon the worms and larvæ, which live under the surface of the earth; otherwise, they might increase so fast as to eat up all the corn, and then there would be nothing left to make bread for us.

The covering of the Magpie's nest, shews the kind care of that good Being from whom it learnt thus to preserve its young from birds of prey.

How wonderfully are the tails of the Nutcracker, the Woodpecker, and of other birds contrived, to assist them in climbing trees: because they are obliged to run up them in search of insects.

He has taught the Orioles to hang their nests at the ends of the slightest boughs, to secure them from Monkies and Serpents.

The Cuckoo in Africa cannot procure honey himself; therefore that good Being has directed him to seek the assistance of man.

The

The Woodpecker, who is obliged to pierce the trees, has a very ſtrong beak, and a curious tongue which he can dart out to a great diſtance; it is armed with a bony point, and covered with a kind of glue, to ſecure its prey.

The Nuthatch, with many birds of the Raven kind, provides a winter ſtore.

The Bee Eater, Hoppoe, and Creepers, prevent inſects from increaſing too faſt.

The curious tongue of the Humming Bird, is well contrived to draw the honey from flowers.

We ſhall therefore find, that if birds had the ſame ſenſe that we have, they would all have great reaſon to thank that Being, who has taught them to get food and to take care of themſelves. For there is not a quadruped, or a bird, or an inſect, which he does not provide for.

Little boys and girls, whom he has made capable of thinking, ſhould never forget theſe things; but whenever they eat, or drink, and are happy, let them always conſider, how much they are obliged to that kind Being for all they enjoy.

END OF THE FIRST PART.

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THE NATURAL HISTORY OF BIRDS;

CONTAINING

A VARIETY OF FACTS

SELECTED FROM SEVERAL WRITERS,

AND INTENDED FOR THE

AMUSEMENT AND INSTRUCTION

OF

CHILDREN.

WITH COPPER PLATES.

PART II.

CONTAINING THE THIRD ORDER.

LONDON:

PRINTED FOR J. JOHNSON, NO. 72, ST. PAUL'S CHURCH-YARD. MDCCXCI.

THE

NATURAL HISTORY

OF

BIRDS,

CONTAINING

A VARIETY OF FACTS

SELECTED FROM SEVERAL WRITERS,

AND INTENDED FOR THE

AMUSEMENT AND INSTRUCTION

OF

CHILDREN.

WITH COPPER PLATES.

PART II.

CONTAINING THE THIRD ORDER.

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PRINTED FOR J. JOHNSON, NO. 72, ST. PAUL'S CHURCH-YARD. MDCCXCI.

THE NATURAL HISTORY OF BIRDS.

ORDER III. ANSERES.

The beak is rather blunt; covered with a membrane, or ſkin; it is gibbous at the baſe, broad and nervous at the point, and the ſides are denticulated, (or uneven like a ſaw.)

The tongue is fleſhy.

The feet are webbed, for ſwimming.

GENUS 27. ANAS.

The bill is ſtrong, broad, flat (or depreſſed), convex, and blunt, the edges of the mandibles are marked with ſharp lamellæ, (or teeth,) and commonly furniſhed at the end with a nail.

The tongue is fringed, and blunt.

The noſtrils are ſmall, and oval.

The toes are four in number; three are placed before, one behind, and the middle toe is the longeſt.

THERE are many ſpecies of the Anas Genus; viz. Swans, ſeveral kinds of Geeſe, and Ducks.

ANAS CYGNUS.

THE SWAN.

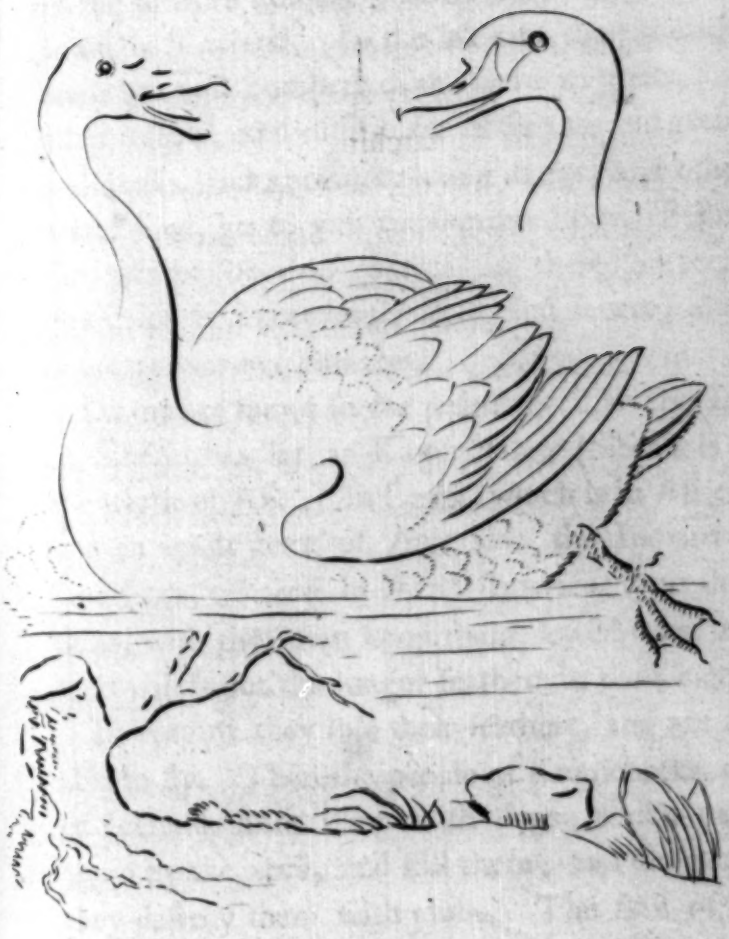
The Swan has a black, callous knob at the baſe of his bill; when he grows old, his feathers become white. Swans lay ſeven or eight eggs; they are two months in hatching. They feed on water-plants and inſects; and will ſometimes eat grain, if it be given them. Some people formerly were ſo ſilly, as to imagine that they always ſang juſt before they died; but this is quite a miſtake, for the tame ſwans ſeldom make any noiſe at all. When they are going to lay, they fix upon a lonely bank, or an iſland; and there make their neſt, of water-plants, long graſs, and ſticks; the male and the female both help. When they have hatched, it is not very ſafe to go near them; for their pinions, or wings, are ſo ſtrong, and they can ſtrike ſuch a blow with them, as would break an arm or a leg.

The Swan's neck is very long, and he is a moſt elegant and majeſtic bird when he is ſwimming. Many of them are to be found upon the ſalt water creek, or inlet, at Abbotſbury, in Dorſetſhire; and upon the river Trent, and on the Thames. They are ſaid to live two or three hundred years.

The

ORDER 3

Genus 27. Anas.



SWAN.

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B L

The Wild Swan's beak is black, and it has a yellow caſe.

Wild Swans do not breed in Great-Britain; but ſometimes they come to Lingey, which is one of the weſtern Iſlands. In the ſummer, they are found in Lapland. In the lakes of that country there are vaſt numbers of the larvæ of gnats, and other inſects; and multitudes of ſwans, and geeſe, and ducks, and gooſanders, and divers, and other water fowl, go to paſs the ſummer there. Before the winter begins, (which in thoſe northern countries is exceedingly cold and ſevere) they come to warmer climates.

Swans are found in the deſerts of Tartary, and in Siberia, as far as Kamſchatka, (Siberia is in the north of Aſia;) in Egypt, which is in Africa; and in many parts of America: the Indians of Louiſiana, which is in North America, wear their ſkins, with the down upon them, ſewed together: their chiefs put the longer feathers in their caps.

In Auguſt they loſe their feathers, and are not able to fly. Then the people of Kamſchatka, and of Iceland, hunt them with dogs, which catch them by the neck, and kill them; and ſometimes they deſtroy them with clubs. The ſkin of the legs they take off whole, and make it into purſes, which look like ſhagreen.

The GOOSE is another bird of the Anas genus.

The beak is large, and ſemi-cylindric, that is, convex (or raiſed) and ſmooth at the baſe.

Geeſe are found in Europe, and in North America. They live to a great age, ſometimes ſeventy or eighty years. There are many different kinds, and moſt of them are wild: their feathers are generally white, or white and grey. Great numbers are bred in Lincolnſhire.

Some goſherds * keep an hundred, each of which perhaps will have ſeven young ones. Whilſt they are ſitting, they are in the ſame houſe with the goſherd; in every room he has three rows of wicker pens, one over another; the goſherd drives all his geeſe twice a day to water, and brings them back, and puts thoſe who lay in the higheſt pens, in their proper places: he knows them all ſo well, that he ſeldom makes a miſtake; for though wild geeſe, and all wild fowl, of the ſame kind, be marked in the ſame manner, yet all domeſtic birds, or poultry, of the ſame kind, become in time very differently marked, and no two are exactly alike; ſo that every man may know his own from thoſe of other people.

* A Goſherd is a man who takes care of a flock of geeſe; as a Shepherd is a man who takes care of a flock of ſheep.

The

The goſherds pull off the feathers from the geeſe four or five times a year; which is very cruel: for beſides hurting them, if the weather ſhould be cold, many of them die. We uſe their quills for pens, and their feathers in our beds and pillows.

Whilſt the tame gooſe ſits, the gander viſits her twice or three times a day; and ſometimes takes her place: and after ſhe has hatched, he walks about with her and the goſlings, and ſeems as if he would attack any thing that may come near them.

All geeſe, both wild and tame, have a white ring round their tails: wild geeſe fly very high, and moſtly in a line; their cry is ſometimes heard when they are at ſo great a height, as ſcarcely to be ſeen. Where there is a flock of geeſe, one always watches, whilſt the reſt ſleep; and that he may not forget himſelf, he ſtands upon one leg, and ſo they watch by turns: if that gooſe that is watching, hears any noiſe, he makes a cackling, and awakens the reſt.

Rome is the capital of Italy, and was once the firſt city in the world: the Gauls wanted to take it, and they had burnt and deſtroyed many of the buildings; but the Capitol, which was a large fortreſs, (or place of defence) was ſtill in the

hands of the Romans. The Gauls attempted to climb up the walls in the night; but ſome Geeſe, that were in the Capitol, heard them, and gave the alarm. The Romans immediately puſhed down the Gauls; ſo that the greateſt city in the world was once ſaved by a few Geeſe.

The tame Gooſe breeds but once in a year; but if the eggs be conſtantly taken away, ſhe will lay enough for three broods.

There are many kinds of Geeſe, the Brent Gooſe, the Bernacle, the Bean Gooſe, the grey lag Gooſe, and the white fronted Gooſe; the Shield Drake is a beautiful bird of the Gooſe kind, the bill is broad, and of a bright red, it ſwells into a knob at its baſe; the forehead is flattened, the head, and upper part of the neck, are of a fine blackiſh green, the lower part of the neck white, and the upper part of the back an orange bay. Shield Drakes inhabit the ſea-coaſts, and breed in rabbit-holes: when any body goes to take their young, they pretend to fly along as though they were wounded, that he may run after them; this gives their young ones time to get away. For this reaſon they were called Fox Geeſe. They lay fifteen or ſixteen eggs, and in winter they fly together in great flocks. Sometimes they will carry

carry their young, from one place to another, in their bills.

There is a Gooſe found in Falkland's Iſlands which is called the Loggerhead Gooſe: its wings are ſo ſhort, that it cannot fly; but it uſes them like oars, upon the water, and moves ſo faſt, that it is not very eaſy to be ſhot. In order to catch the Loggerhead Geeſe, the ſailors rowed round a flock in their boats, and forced them on ſhore; for a little while they ran very faſt, but they ſoon grew tired; and when they ſat down to reſt, the ſailors overtook and killed them.

The Buſtard Gooſe inhabits Falkland's Iſlands. It ſtands very high on its legs, and with its long neck above the graſs, ſees if there be any danger near.

The Snow Geeſe are very common at Hudſon's Bay; they come there twice a year, in May and September, but ſtay only a ſhort time: the inhabitants kill many thouſands; they pluck their feathers, take out their entrails, and put the bodies into holes dug in the ground, and cover them with earth; the ground freezes above, and keeps them ſweet all the winter.

In Siberia (for they are found in Siberia) they are taken in nets: a man is covered with a white ſkin, and creeps before them; they miſtake him

for their leader, and go after him, whilſt other men follow, and drive them into nets, or a kind of pound.

The Canada Geeſe are found as far north in America as Hudſon's Bay: they come there in April or May. The inhabitants kill many thouſands, and ſalt them, and put them into barrels. When they are expected, the Indians make a row of huts, of boughs, acroſs the parts which they ſuppoſe the Geeſe will paſs; and as the flock flies over, the Indians mimick their noiſe; the Geeſe ſtop in their flight, and each Indian having two guns, fires the one after the other; and ſometimes a good ſhooter will kill two hundred in a day. The Indians keep many of them all the winter in a large hole dug in the ground; they cover them with mould, and keep them in their feathers.

There is a Gooſe called the Ruddy Gooſe: it is found in the ſouthern parts of Ruſſia, and of Siberia: in the winter it flies into India. It makes its neſt in the craggy banks of the Wolga, and of other rivers; or in the holes of the Marmots, which they have deſerted*. It forms burrows for itſelf like the Shield Drake: ſometimes it

* The Marmot is a little animal of the Rat kind, that burrows under ground, and ſleeps all the winter.

makes

ORDER 3

Genus 27 Anas.

CANADA GOOSE.

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makes its neſt in a hollow tree, and lines it with its own feathers. The male and female ſit by turns: when the young are hatched, the parent often carries the young to the water in its bill. The male and female are very fond of each other; for if one be killed, the other will not fly away, until it has been frequently ſhot at.

There is a kind of Gooſe on Bering's Iſland. Bering's Iſland is between the northern coaſt of Aſia and America. The natives purſue theſe Geeſe in boats, at the time of moulting, and kill them; ſometimes they hunt them on land with dogs; and ſometimes they catch them in pits, covered with graſs.

The Brent Gooſe is another kind: it comes in the winter on the Engliſh coaſt. In Holland and Ireland, they are ſometimes taken in nets, which are placed acroſs the rivers. In the year 1740, they came in ſuch large flocks on the coaſt of Picardy, in France, that they deſtroyed all the corn near the ſea, by tearing it up by the roots; and though many of them were knocked down and deſtroyed, yet the people could not be relieved from them, until the north wind, with which they came, ceaſed to blow, and then they all went away.

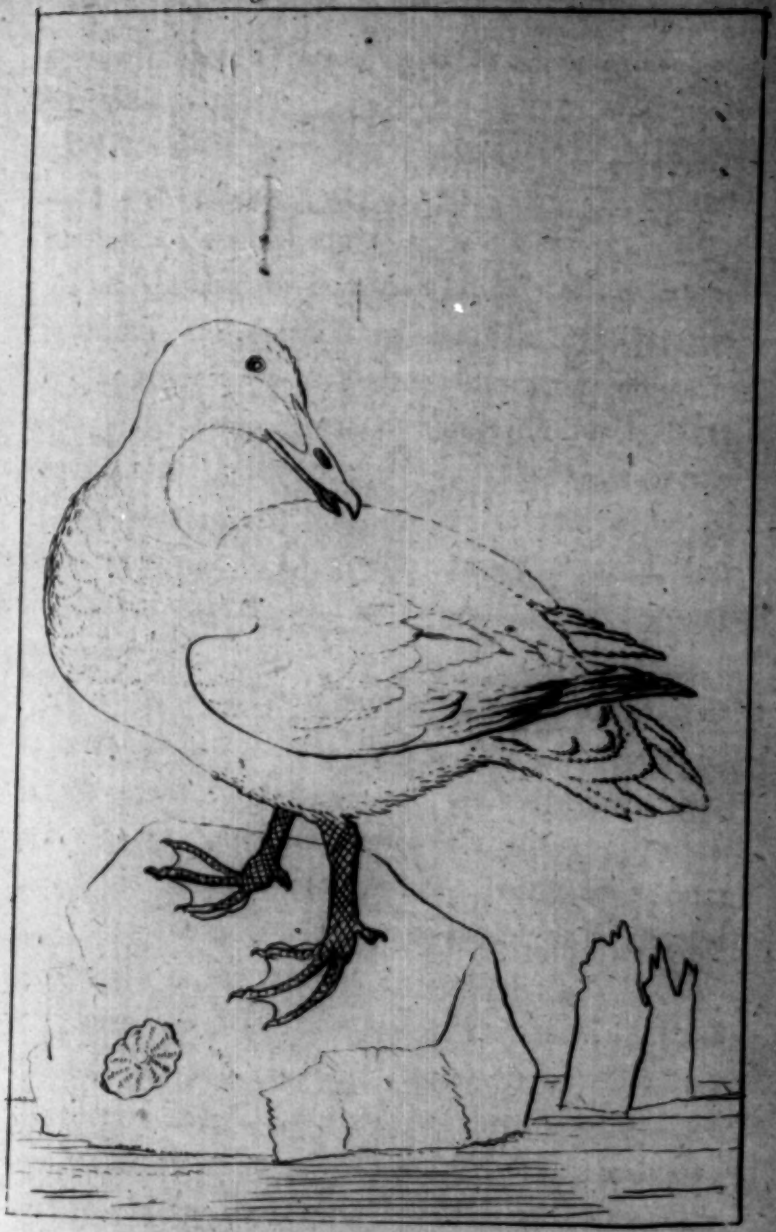
The Eider Duck is of the Gooſe kind: it is double the ſize of a common duck; its bill is black and cylindric, with a wrinkled and divided cere; the feathers of the cheeks, and of the fore part of the head, come far upon the bill, and form two ſharp points; the forehead is quite black. There is a broad black bar, which goes from the corners of the bill, acroſs the eyes, to the back part of the head; and the legs are green.

It is found on the weſtern iſlands of Scotland, and in Norway, Iceland, and Greenland; its down is very ſoft, and light, and elaſtic; it is uſed in coverlets for old people, who want to be kept warm, but cannot bear a covering that is heavy, ſuch as blankets. The Eider Duck lays five or ſix eggs, among ſtones, or plants, near the ſhore; and makes a very warm neſt by pulling the down from her breaſt. The people who live near the ſhore, watch her, and take away both the down and the eggs. The duck lays again, and is then obliged to pull all the reſt of the down from her breaſt. If ſhe be robbed again, ſhe will lay a third time; but then the Drake muſt find the down for the neſt, becauſe there is none left upon the poor Duck. Three pounds of this down may be preſſed into a ſpace, a little larger than an orange;

yet

ORDER 3

Genus 27 Anas.



EIDER DUCK.

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yet it will ſpread ſo much, as to fill a quilt five feet ſquare.

Beſides theſe, there are many others of the Anas kind; the Golden Eye, the Wigeon, the Pintail Duck, the Pochard, the Garganey, and the Teal.

The Mallard, or common Duck's bill is ſtrait; the middle tail feathers of the male turn up; the head and neck are of a deep ſhining green; the upper part of the breaſt, of a purpliſh red: it has a rich purple ſpot on the wing. The birds of this ſpecies pair in the ſpring, and lay from ten to ſixteen eggs. In Lincolnſhire they are wild, and in great numbers; and many are taken every year in decoys.

A decoy is a large pool, ſurrounded by trees: from the pool there are ſeveral pipes, or channels, which grow narrower; the ſides of theſe pipes are planted with reeds, ſo that the decoy man can walk behind them without being ſeen; and they are covered with a net, which is ſupported by hoops, in the form of an arch.

There are Ducks, called Decoy-ducks; theſe are tamed, and taught to come when they hear the decoy-man's whiſtle: he throws hemp-ſeed on the water, eſpecially in the pipes, or channels; and this hemp-ſeed ſwims: the decoy-ducks come to eat it, and are followed by the other Ducks, up this

this pipe, until they get under the net; then they are taken. The decoy-ducks immediately dive under water, and go back again into the pool.

In China, they throw upon the water a number of gourds; the wild Ducks being uſed to ſee them, are not afraid, but ſwim near them. The Chineſe, in order to take the Ducks, ſcoop out the inſide of other gourds, and make a few holes to ſee and breathe through; they then put them over their heads and faces, and go into the water. Nothing appears above the water but the gourds: as the Ducks do not at all regard them, the man eaſily gets amongſt the flock, and pulls them under water, by the legs, one after another, until he be ſatisfied.

The wild Ducks are very artful birds, and do not always make their neſts cloſe to the water, but frequently at a good diſtance from it; the old Ducks will then carry their young between their beaks or their legs. Sometimes ducks will lay their eggs in a high tree, in a Magpie's or a Crow's neſt that has been deſerted. And there has been an inſtance of a Duck ſitting upon nine eggs in an oak-tree twenty-five feet from the ground: the eggs were laid upon ſmall twigs, placed croſsways.

In

In France, they watch when a flock of wild Ducks is flying near; and let out a tame Duck, who entices the wild ones within gun-ſhot; and ſo they are killed. They are ſometimes taken with hooks, baited with ſheep's lights, which ſwim upon the water.

In the river Ganges, (which is in India) they take Ducks very much in the ſame manner as in China; only inſtead of gourds, or calabaſhes, they uſe earthen veſſels, ſuch as the Gentoos boil their rice in. The Gentoos are a very harmleſs, good, and humane people, who inhabit the Eaſt Indies. They live only upon vegetables, becauſe they think it is cruel to put any thing to death: and they never uſe the ſame veſſels to boil rice in twice, but throw them, after once uſing, into the river; ſo that the Ducks are uſed to ſee them. In the ſame manner they take wild Geeſe in South America; only they uſe a hollow wooden veſſel to put their heads into.

In China, they prefer tame Ducks to thoſe that are wild. They hatch them by the heat of a fire; the eggs are placed in boxes of ſand, on a brick hearth; and the hearth is properly heated. The little Ducks are fed with crawfiſh, and crabs, cut ſmall; and in about a fortnight provide for themſelves. They are then put under the care of an old

old Duck, into a ſampane, or boat: when in this boat, the whole flock, perhaps three or four hundred, go out to feed, and return at the word of command. When the crop of rice is cut, the plantations afford much food for the Ducks; and though ſeveral thouſands, belonging to different boats, are feeding in the ſame plantations, they ſeparate when they are called, and each comes to its own boat: and yet on the river at Canton, there are perhaps forty thouſand of theſe boats, all moored, or faſtened, near to one another. When the Chineſe put nets into the water, they are obliged to ſhoot continually, to frighten away the Ducks; or they would very ſoon take all the fiſh out of the nets.

The King Duck is found at Hudſon's Bay, in North America; its down is as ſoft, and as uſeful, as the down of the Eider Duck. The natives ſew their ſkins together, to make themſelves clothes, which are very comfortable. They kill the King Ducks with darts. A number of men go in canoes: when they ſee a flock, they ſhout, and make as much noiſe as they can; the Ducks are too much frightened to fly away, ſo they dive under the water; the Indians know by the bubbles where they will riſe again, and row to

to the place. The Ducks are ſoon tired, and killed.

There is a Duck, called the Scoter, found on the coaſt of Scotland. On the baſe of the bill is a red knob, with a yellow line in the middle; it feeds on ſmall ſhell-fiſh, and dives very deep. The Scoters are caught in nets, placed under water, where theſe ſhell-fiſh abound. They fly ſo low, that their legs often touch the water. They ſwallow the fiſh whole, and ſoon digeſt the ſhells.

The Velvet Duck is moſtly black; the bill is yellow, except at the baſe, where it is black, and has a black knob. The lower eye-lid, and a ſpot in the wing, are white. It is common in ſome parts of Siberia. In breeding time, the Velvet Ducks go far inland, to lay their eggs: the males then go away, the females ſtay until the young are ready to fly. They are in great plenty at Ochotſka, in Siberia. Fifty or more of the natives go in boats, and ſurround the flock, and drive them as the tide flows up the river Ochotſka; as ſoon as the water ebbs, they fall upon them with clubs, and kill them.

The Muſcovy Duck, from the beak and round the eyes, is bare of feathers, and pimpled; it is larger than the common Duck. Muſcovy Ducks

are

are not ſo called becauſe they come from Muſcovy, or Ruſſia; but becauſe of a muſky ſmell which comes from them. Their eggs are of a greeniſh colour: they lay more eggs, and ſit oftener, than other Ducks. When wild, they make their neſts on the ſtumps of old trees; and perch, during the heat of the day, on the branches that are covered with leaves. They are ſuppoſed to be natives of South America.

There is a Duck, called the Scaup Duck. It inhabits the northern parts of Europe; it feeds on broken ſhell-fiſh. It is found too on the lake Zirchnichew, in Carniola. Carniola belongs to Auſtria; it is in Germany, and cloſe to the ſtate of Venice. It makes its neſt in hollows, in the banks of the lake. Theſe Ducks are killed by the inhabitants with clubs; they drive them out of theſe holes in the middle of the day, when the ſun ſhines full upon them, and their eyes are ſo dazzled, that they cannot ſee; and ſo they ſuffer themſelves to be killed, or taken.

The Shoveler, another kind of Duck, has a bill very broad at the end, and flattened very differently from any other of the Duck kind. It feeds chiefly on inſects and flies, which it catches very cleverly as they fly over the water; and it is

is very fond of the eggs and larvæ of gnats, which are found in great quantities under water. The Shoveler inhabits Europe and America.

The Ural Duck is found in the lakes near the Ural mountains in Aſia; and it frequents the rivers Oby and Irtiſch, in Siberia. It is ſeldom, if ever, ſeen to walk on the ground; for the ſituation of its legs prevents it, they are placed ſo far backward; but it ſwims well, and remarkably faſt; at this time, the tail is covered with water, and ſerves inſtead of a rudder. Its neſt is formed of water-plants, and floats like the neſt of the Grebe.

The American Wigeon perches on trees, and feeds in company. Like many other kinds of birds, who fly in flocks, they employ centinels to watch and alarm them, in caſe of danger. At Martinico, which is one of the Caribee iſlands in the Weſt Indies, they fly in great companies from one rice plantation to another, and do much miſchief.

There is a Duck, which was found in Duſky Bay, in New Zealand, which is ſuppoſed to live upon the worms that it finds in the mud when the tide ebbs; becauſe the end of the bill is ſoft, and eaſily bends.

The

The Long-tailed Duck is found in the northern parts of Europe, and of America. It builds its neſt among the graſs, near the ſea, and lines it with the down of its breaſt, like the Eider Duck. The down is as valuable as that of the Eider Duck, but cannot be procured in large quantities. It lays five white eggs, and carries the young to the water in its bill. It feeds on ſmall fiſh, for which it dives; and it ſwims remarkably well.

The Golden Eye inhabits Norway and Sweden in the ſummer. It is found on the Engliſh coaſt in the winter; it dives well, and feeds on ſmall fiſhes. It is moſtly ſeen in the water, for it is very aukward in walking; and for this reaſon it cannot be tamed. Beſides, its feet grow ſo tender, that it is ſoon unable to walk at all, if it be kept on the land. It is found in America and Greenland. It makes a round neſt, of graſs; lines it with feathers from its breaſt; and lays from ſeven to ten eggs.

The Summer Duck is moſt beautifully marked. Its bill is red, the eye-lids crimſon. From the back of the head there is a long and elegant creſt, which hangs down the neck. The head and creſt are gloſſy green, which in ſome ſituations

Genus 27 Anas.

SUMMER DUCK.

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ſituations appears to be purple. The reſt of the plumage is very rich and beautiful.

It inhabits Mexico, and ſome of the Weſt India iſlands. In the ſpring it goes as far north as New York, and breeds there. It builds its neſt in the hollows of trees, in the holes which have been made by Woodpeckers, and ſometimes between the forks of the branches. When the young are hatched, the old Duck takes them on her back to the water. The natives of Louiſiana uſe their necks to ornament their pipes, or calumets of peace with. The calumet is made of a red ſtone, into the form of the bowl of a tobacco-pipe, and it is fixed to a reed to ſmoke with. It is, like the olive-branch, conſidered as the emblem of peace amongſt the Indians.

There is a Duck in China, very much like the Summer Duck; it is called the Mandarin Duck. A mandarin in China, is a magiſtrate, or officer of ſtate.

The Teal is another of the Duck kind. It is frequently found in England in the winter: it ſtays in France all the year. Its neſt is made of ruſhes, of pith, and feathers: it is very large, and generally built ſo as to float upon the water among the ruſhes.

The

The Summer Teal breeds in France. It makes a curious neſt, covered on the top, and generally with an opening on one ſide, towards the ſouth.

GENUS 28. MERGUS.

The Gooſander's bill is ſlender, furniſhed at the end with a crooked nail; the edges of each mandible ſharply ſerrated, (or toothed like a ſaw.)

The noſtrils are near the middle of the mandible, ſmall, and ſubovated, (or rather oval, or egg-ſhaped.)

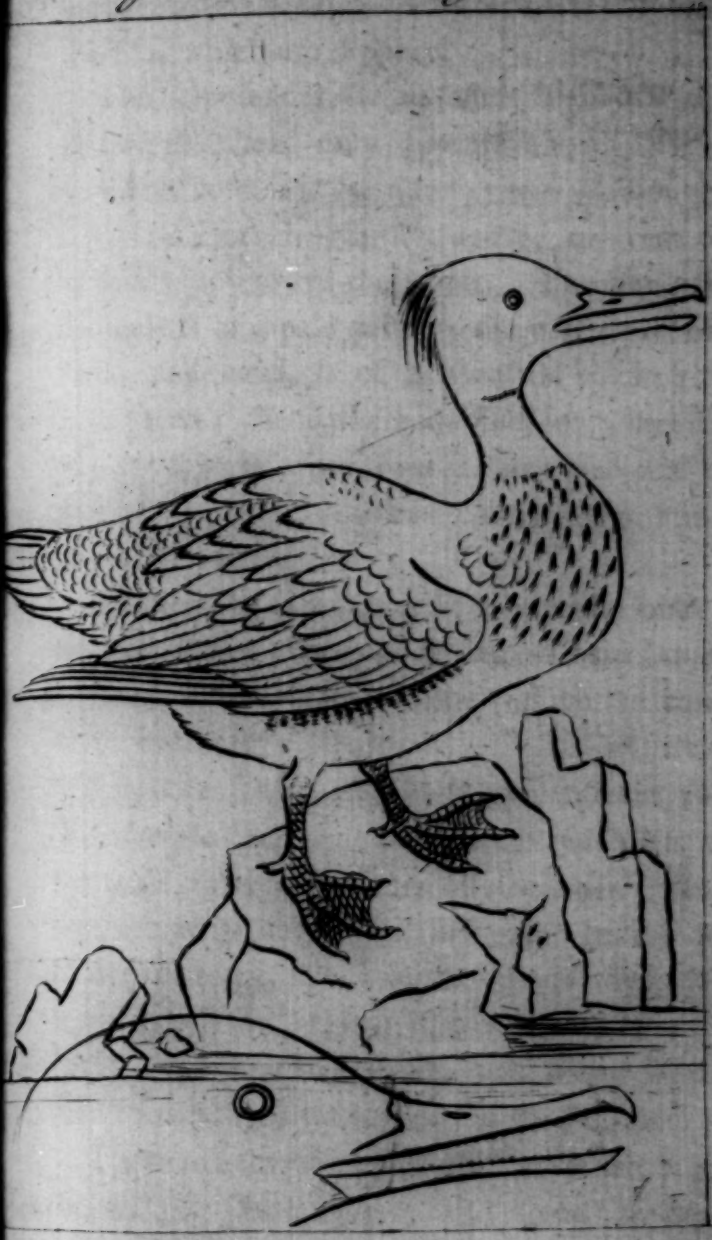
The tongue is ſlender and rough.

It has four toes, three before, and one behind. The outer toe is longer than the middle toe.

GOOSANDERS, in hard winters, are found in ſome of the rivers in England. They feed on fiſh, and deſtroy ſuch a quantity, that they have been ſometimes called Bird Otters; for Otters live very much upon fiſh. The Gooſander ſometimes takes a larger one than his ſtomach can contain; the head part is firſt digeſted, and then by degrees his ſtomach takes in the reſt. His rough tongue, and the teeth, or notcher

ORDER 3

Genus 28 Mergus.



GOOSANDER.

lished Feb.ʸ 6. 1787 by Jos. Johnson St. Pauls Church Yard London.

notcher in the beak, are very uſeful to him to hold the fiſh, which are ſlippery.

The Gooſander ſwims with his body under water; his head only appears above. He can dive very well, and for a long time. Though his wings be ſhort, he can fly ſwiftly; and very often he ſkims juſt above the water. The fore part of his body is of a pale yellow; the upper part of the neck, and head, is of a beautiful black, gloſſed with green; the feathers are fine, long, and ſilky; and as they are raiſed from the forehead and back part of the head, the head ſeems large, and the feathers form a creſt.

Though the Gooſander be a beautiful bird, yet his fleſh is not very good to eat. There is a contrivance in the body for air, which he can uſe under water.

The Gooſander makes its neſt on the ſhore. The female Gooſander is always much leſs than the male, and her colours leſs beautiful. In the ſummer they abound in Lapland. In the lakes of that country, Mr. Maupertuis obſerved a great quantity of the eggs of inſects; they looked like ſeeds; and the Gooſanders, and many kinds of water fowls, feed upon them in the ſummer.

There are ſeveral kinds of Gooſanders; ſome are called Deen divers, and ſome are called Smews;

Smews; but they all have creſts, and are found in Europe, except one kind, and that is found in America.

GENUS 29. ALCA.

THE AUK.

The bill is ſtrong, ſhort, thick, and compreſſed, (that is, flattened, not like a Duck's bill, above and below, but at the ſides.) It is furrowed often acroſs; and the lower mandible is gibbous, (that is, it has a prominence, or knob.)

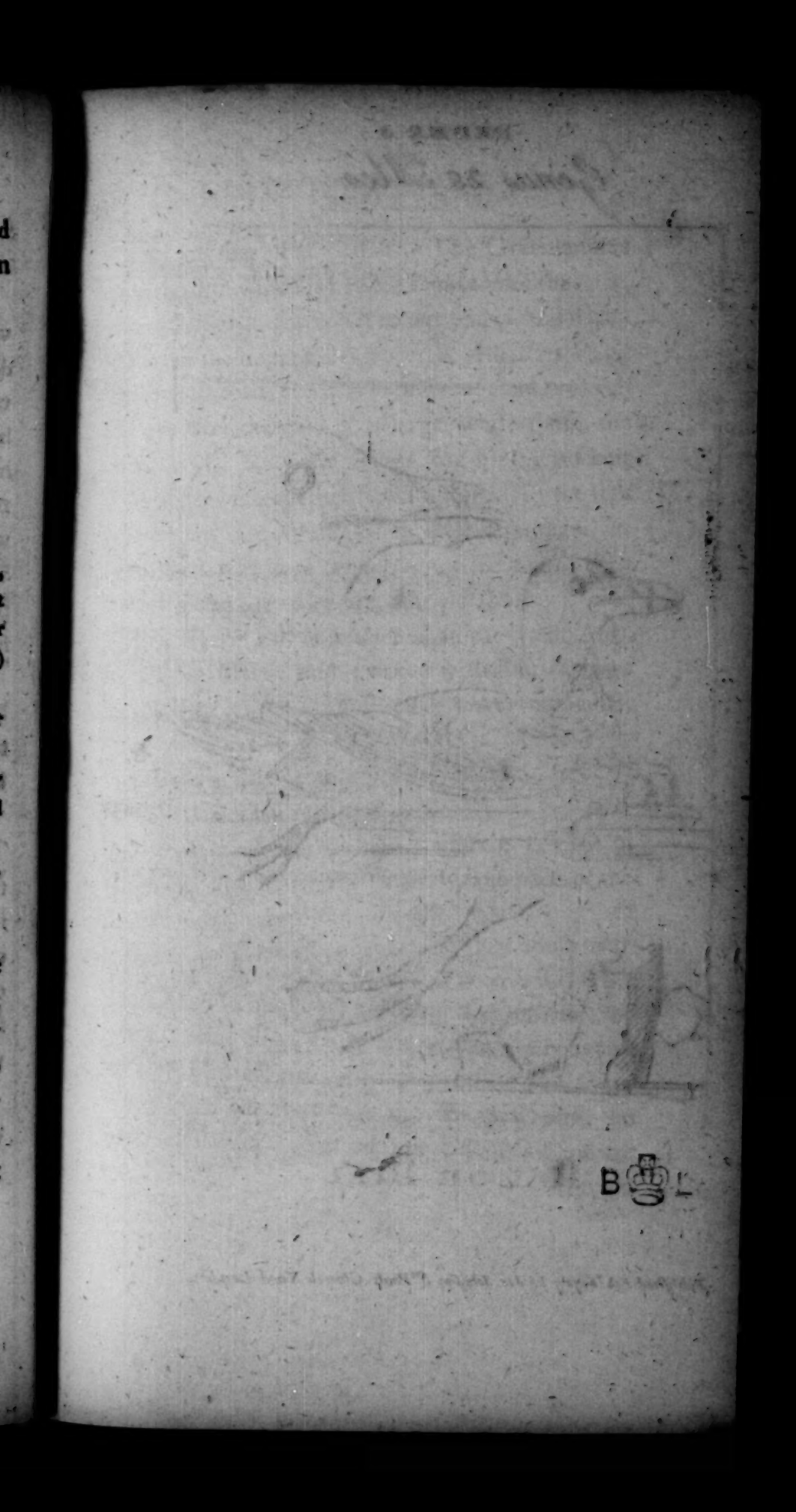
The tongue is almoſt as long as the bill.

The noſtrils are linear, (or very narrow) and placed near the edge of the mandible.

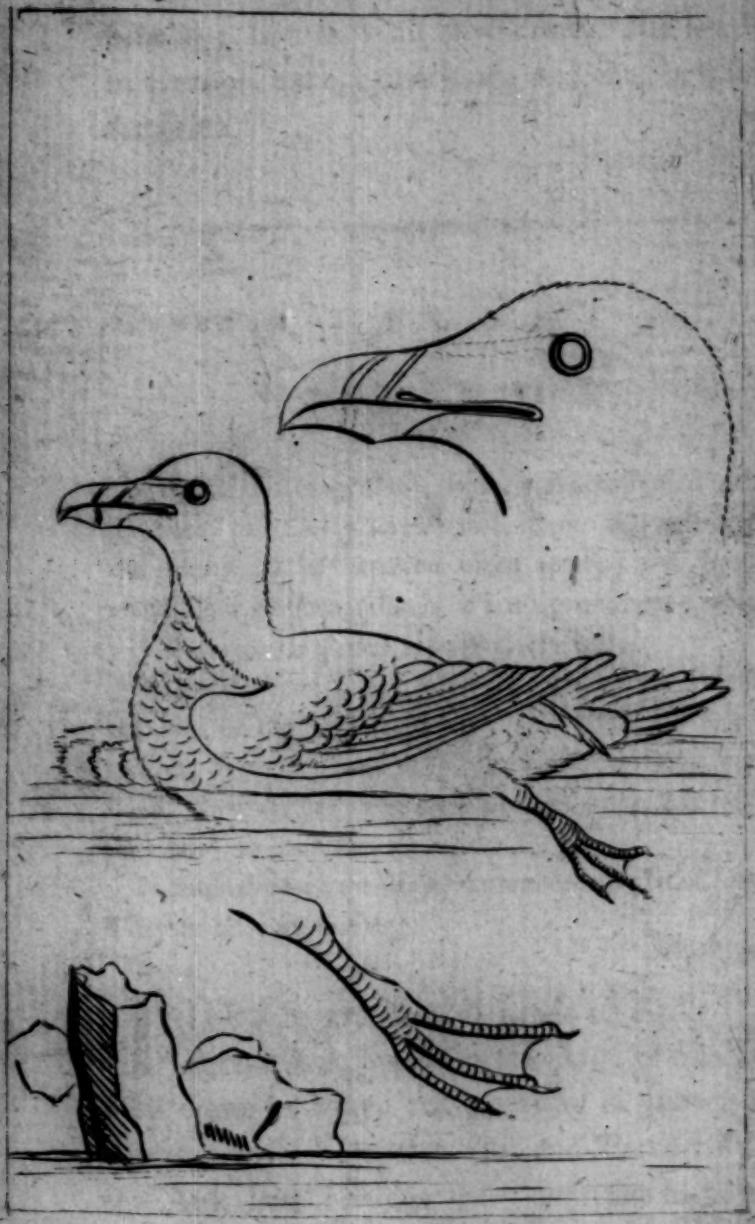
Their legs are placed very backwards, ſo that when they ſtand, they appear to be fixed upright upon the tail, and they have no back toe.

In moſt the toes are three in number, all placed forward. They ſit only on one egg.

THERE are ſeveral kinds of Auks. The great Auk breeds in the iſland of St. Kilda; they come in May, and go away in June; their wings are ſo ſhort, that they can ſcarcely fly; ſo the Auk lays her egg very near the high water mark; and if this egg be taken away, ſhe does not



Genus 29 Alca.



RAZOR BILL.

Published Feb.ry 6.th 1787 by Jos. Johnson St. Pauls Church Yard London.

not lay another that ſeaſon. The Greenlanders blow the ſkin which is between the jaws of the Auk, into a bladder, and faſten it to one end of their darts.

Part of the upper bill is covered with ſhort, black feathers, like velvet; it is very ſtrong, and between the eye and the bill is a large white ſpot; the neck, back, tail, and wings, are black. Their ſkins are ſewed together for clothing. In the ſeas where they are found, they ſeldom wander far from the land; and when ſailors ſee them, they always gueſs that they are near the ſhore.

The Razor Bill is ſmaller than the great Auk. Its bill is black, and marked with four furrows on the upper, and three on the lower mandible. From each eye to the bill is a line of white.

They are in great numbers at Flamborough Head, in Yorkſhire; and at Caldey Iſland, near the coaſt in Pembrokeſhire; and in the Iſle of Angleſea, and many other iſlands, and parts of the Britiſh coaſt, where they breed.

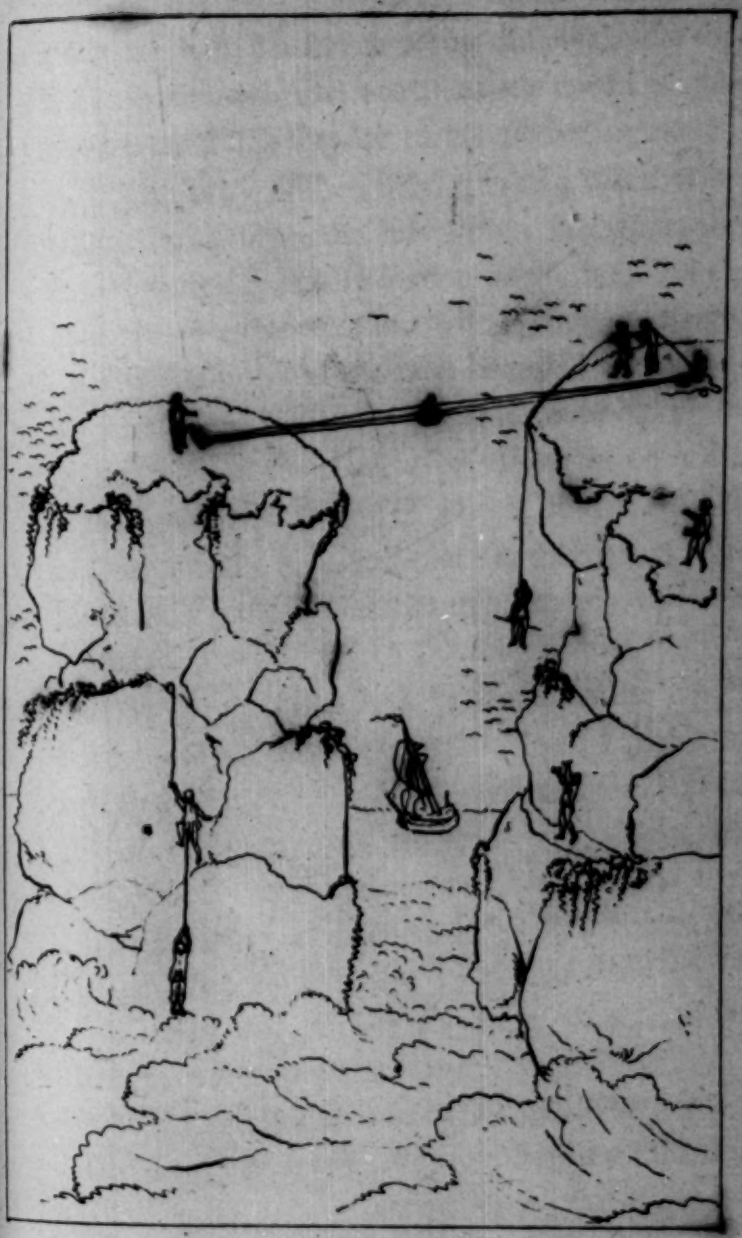
They are birds of paſſage, and they come with the Guillemot in the ſpring, and leave us in winter. A few of them are ſeen in February, or March, as if ſent before, to give ſome account to the reſt: they go again, and ſome time after they come in great numbers. If the weather be ſtormy, many of them die in their paſſage, and are

thrown up dead on the ſhore, by thouſands, quite lean and ſtarved.

They are not at the trouble of making a neſt, but lay each a ſingle egg, on the ledges of the rocks. Numbers of them lay cloſe together. If this egg be taken away, they will lay another, and ſo on to five; but they never ſit on more than one at a time; and though ſo many lay cloſe to one another, yet each knows its own egg.

The egg is ſo fixed to the bare rock, by a cement, that it does not roll off. Many poor people live upon their eggs; and to get them, a man faſtens a rope round his waiſt, which is afterwards brought between his legs, ſo that he ſits upon it. In this manner ſix or ſeven people, who hold the other end of the rope, let him down the rock, where he finds the birds eggs; he puts them into a baſket, that is tied to a ſtring, and drawn up by the people who are at the top of the rock, as often as it is filled.

Sometimes they tie one end of the rope to a tree; and the man who ſits at the other end ſwings himſelf from one part of the rock to another, puſhing himſelf away by his feet. But in Norway they are much more ſkilful; for there, ſeveral men go under the cliffs in a boat; one has a rope tied round him, and a pole in his hand, with



The MANNER of BIRD-CATCHING.

Published June 1st. 1787 by Jos. Johnson S.t Pauls Church Yard London.

B L

with a hook at one end: he fixes this hook in a cleft of the rock above, and draws himſelf up, climbing with his hands along the pole; the men who are below in the boat, put the hooks of their poles againſt his feet, or to his girdle, and help to puſh him up. When he is got to a place where he can ſtand firm, he lets down the rope, one end of which is faſtened to himſelf, and ſo helps to draw up another man, who is ſupported in his turn by the poles of the men below. Thus three or four men get up, climbing, and helping one another, from ſome parts of the rocks to others. But ſometimes they fall down, and are killed; and ſometimes they pull one another down; and ſometimes looſe ſtones fall upon them, and cruſh them.

The Black-billed Auk is found on the Engliſh coaſt, and on the coaſt of the Iſle of Candia, and in other parts of the Mediterranean ſea. In the bay of Gibraltar, the water is very clear, to a great depth: it is curious to ſee theſe birds, under water, darting after the fiſh, as ſwiftly almoſt as though they were flying in the air, and turning after them ſo quickly in every direction, that their prey ſeldom can eſcape.

The Duſky Auk too is wonderfully active in the water, but very clumſy and ſtupid on the ſhore.

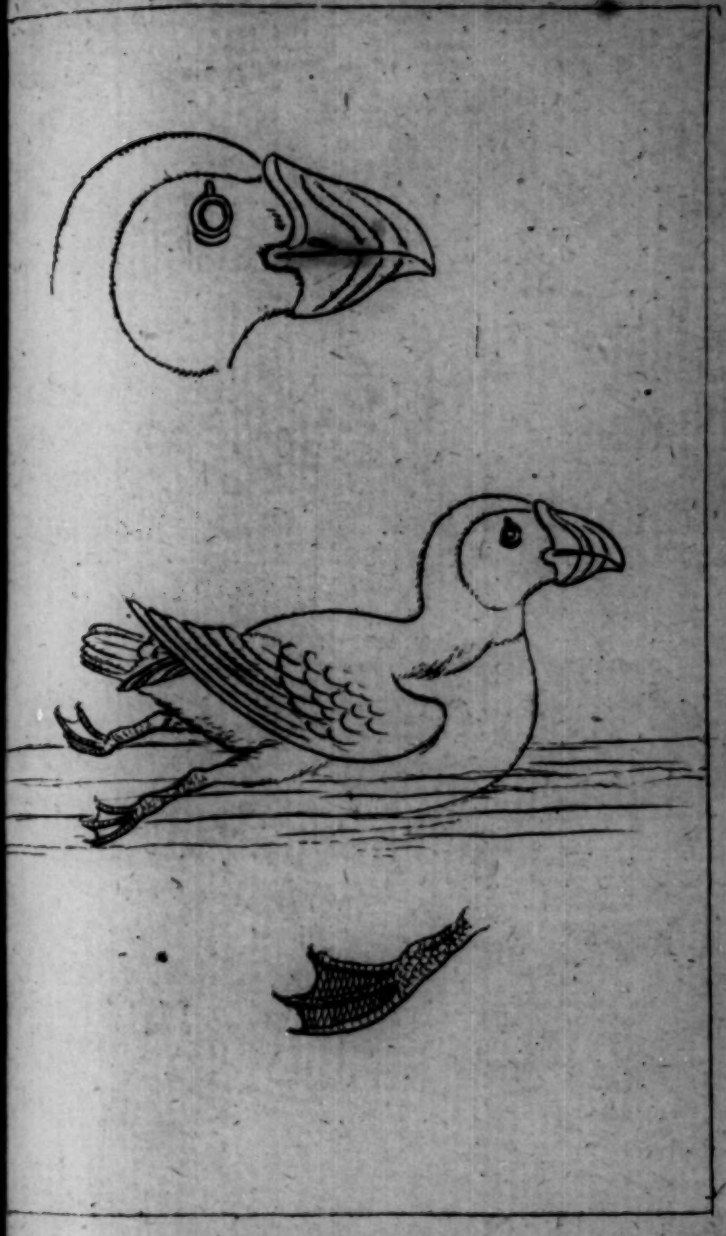
It can ſcarcely get upright on its legs; and then it cannot ſtand, unleſs its tail be ſupported by a ſtone. It makes its neſt in hollow places in the rocks; and ſometimes, in an evening, it will fly on board ſhips, and may eaſily be taken with the hand.

The Perroquet Auk is found at Kamſchatka, and on the weſtern ſhores of America. It makes no neſt; but lays its egg on the bare rock, or ſand. Like the reſt of the Auks, it is very ſtupid. The people on the coaſt where they are found, catch them in this manner: A man hides himſelf under a looſe fur cloak, among the rocks, in the evening; the birds, as they return to rooſt, run up the ſleeves, or under the ſkirts, for ſhelter during the night; and the man, who has hid himſelf, kills them as faſt as they enter; and perhaps in one evening takes as many as he can carry away.

The Puffin is another bird of the Auk kind. Its cheeks are white, and ſo full of feathers, that its head appears large, and almoſt round. There is a broad collar of black round his neck; and his legs are ſmall, and orange-coloured: when he ſtands, he reſts on the whole length of his legs. The Puffin with great difficulty riſes from the ground; but when he once begins to fly, few birds can fly longer. In Kamſchatka, the natives

wear

Genus 29 Alca.



PUFFIN.

Published Feb.ry 6. 1787 by Jos. Johnson St. Pauls Church Yard London.

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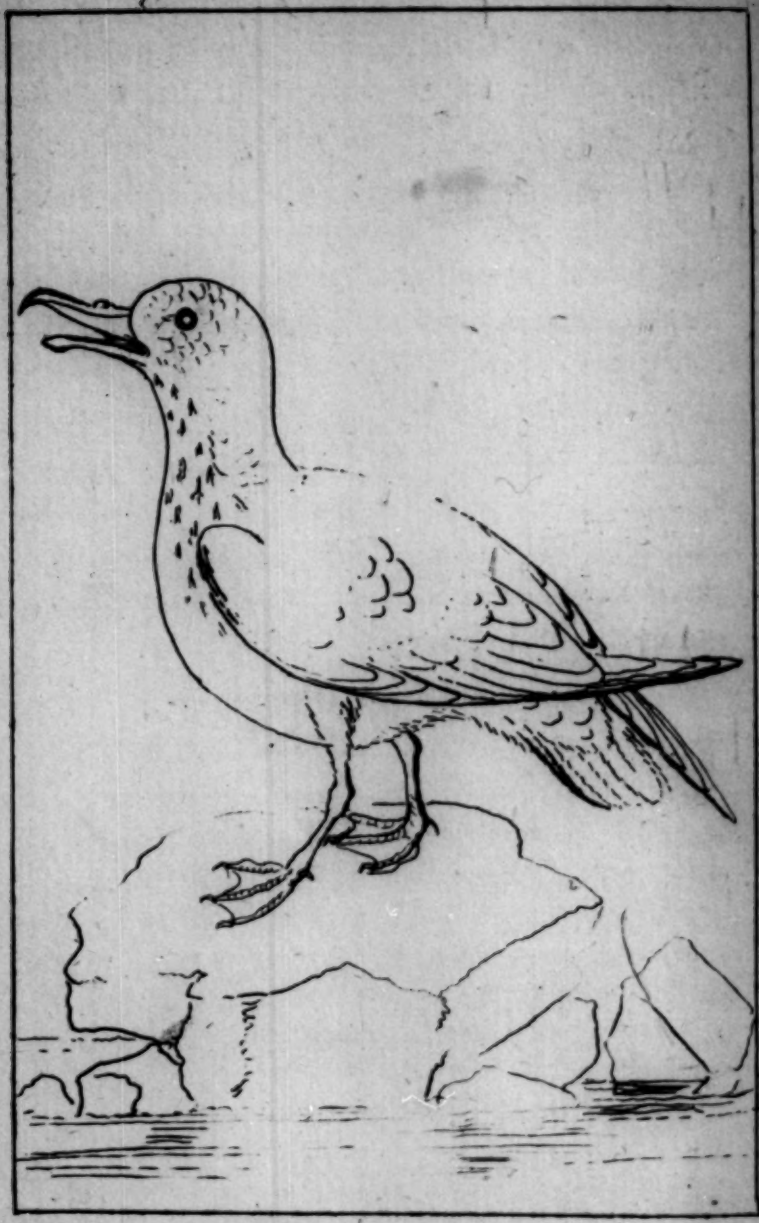
ORDER 3

Genus 30 Procellaria.



PETREL.

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wear their bills round their necks as an ornament.

The Puffins build in many of the iſlands on the coaſt of England. They get into rabbit-holes, and there each female lays one egg, and hatches her young one. Sometimes people take them with ferrets, as they take rabbits; and ſometimes they draw them out with a hooked ſtick, for they can bite very hard, and they make a ſtrange noiſe, like a dumb perſon trying to ſpeak. About the middle of Auguſt, all the old Puffins go away from England, and leave the young ones behind, that cannot follow them: theſe are all devoured by the Peregrine Falcon, who watches for them at the mouth of their holes.

GENUS 30. PROCELLARIA.

The Petrel's bill is ſtrait, hooked at the end; both mandibles of equal length; the upper one hooked at the point, the lower compreſſed, and channelled at the point.

The noſtrils are cylindric, (or in the form of a pipe, or tube) lying along the beak, and growing to it. In a few ſpecies the noſtrils are ſeparate, and in two pipes, or tubes.

Their feet are webbed, and they have a ſhort proceſs, (or ſpur) inſtead of a back toe.

The legs are naked, to above the knees.

THE Fulmar is a Petrel, and inhabits the iſland of St. Kilda, which is one of the weſtern iſlands, near the coaſt of Scotland. It comes

comes in November, and ſtays until the September following: it lays one large white and brittle egg, and hatches it in the middle of June. There is no bird ſo uſeful to the iſlanders, becauſe it furniſhes them with oil for their lamps, and down for their beds, and food for their tables. The oil is taken for a medicine, and it is good for bruiſes. Fulmars can ſpout it from their bills to a great diſtance; and they are very apt to do ſo, into the faces of thoſe who try to take them. For this reaſon, they endeavour to catch the Fulmar ſuddenly, and before he is aware, by the neck, to ſave the oil, which is of ſo much uſe. Fulmars are larger than common Sea Gulls. They follow the Whale-fiſhers in great flocks; and when a Whale is caught, they ſettle upon it, and pick out large lumps of fat, even whilſt he is alive. Whales have a great deal of fat, or blubber, under their ſkins; and ſo have the Sea-lions: for in thoſe northern ſeas, where they are found, the water is extremely cold; and the fat which they are covered with, prevents them from feeling the cold. The Whale-fiſhers often know that a Whale is near, by the flock of Fulmars that are flying about him.

The pouch of the under jaw of the Fulmar is formed into a bladder: theſe bladders are fixed to the

the end of darts, and these darts are often used to kill the Fulmar.

There is another Petrel, called the Storm Finch, or Stormy Petrel. It is about the size of a Swallow, but its wings are much longer. The whole bird is black, except near the tail, and there the feathers are white. It can spout oil like the Fulmar. It is said, that the people in the Ferro islands, which lie in the northern ocean, about two hundred miles from Scotland, draw a piece of cotton wick through the bird, and light it, and that then it serves for a lamp or a candle; because the flame is fed by the oil which is in its body.

The Storm Finches are always seen at sea, except whilst they are breeding. When a storm is coming, they fly in numbers after the ships, and then the sailors know that they are to expect bad weather. They fly in this manner in the most dreadful storms, sometimes skimming along the hollows of the waves, sometimes on their summits, and they are never seen to rest upon the surface of the sea. The Stormy Petrels have been observed in the white sea, which bounds a part of Russia. They are excellent divers, and stay under water a long time without rising.

The Shear Water is another Petrel: it is about as large as a Gull, and is found in the Calf of

Man, a ſmall iſland in St. George's Channel, between England and Ireland; and in the Scilly iſlands, which are a little to the weſt of Cornwal, and near the Engliſh coaſt. The Shear Water's head, the upper part of his body, his wings, his tail, and thighs, are black; and all the reſt of the body white. This bird lays but one egg. The young are taken in Auguſt, and are killed, and ſalted, and put up in barrels; and when they are to be cooked, they are boiled, and eaten with potatoes. All the day they are out at ſea catching fiſh; when they come back in the evening, their ſtomachs are full of the oil of the fiſh that they have been eating, and they ſpout it into the bills of the young ones, to feed them. They make their neſts in rabbit burrows, or in holes in the ground.

The Giant Petrel is bigger than a Gooſe. Theſe Petrels are found near Terra del Fuego, which is the moſt ſouthern part of South America. They are often ſeen ſailing, with their wings expanded, but not ſeeming to move, cloſe to the ſurface of the water. Captain Cook met with many of them in Kerguelen's Land (which is very far ſouth in the Indian Ocean) in December; and they were ſo tame, that they ſuffered themſelves to be killed by the ſailors with their ſticks.

They

They feed on fiſh, and on the dead carcaſes of whales and birds.

The Pintado Petrels fly in flocks; ſeldom very high, but generally ſkimming the ſurface of the ſea. They appear in ſuch numbers, that ſeven hundred have been taken in a night. The ſailors often catch them with a tarred ſtring, or with a piece of lard, and a fiſhing rod.

There is a kind of Petrel which differs from the reſt, becauſe each noſtril is a diſtinct ſhort tube. Theſe Petrels were found in New Zealand, in large numbers; ſome were flying, ſome were in holes in the ground, cloſe to one another, or under the roots of trees, and in the crevices of rocks. They made a noiſe like the croaking of frogs, and flew very much at night, as bats do. They ſeem very large, becauſe they have a great quantity of feathers, and two feathers inſtead of one comes from every root; and they lie one within another, and make a very warm covering.

GENUS 81. DIOMEDEA.

The bill is ſtraight, the upper mandible hooked at the point, the lower abrupt, (or ending ſuddenly, as if it were cut off.)

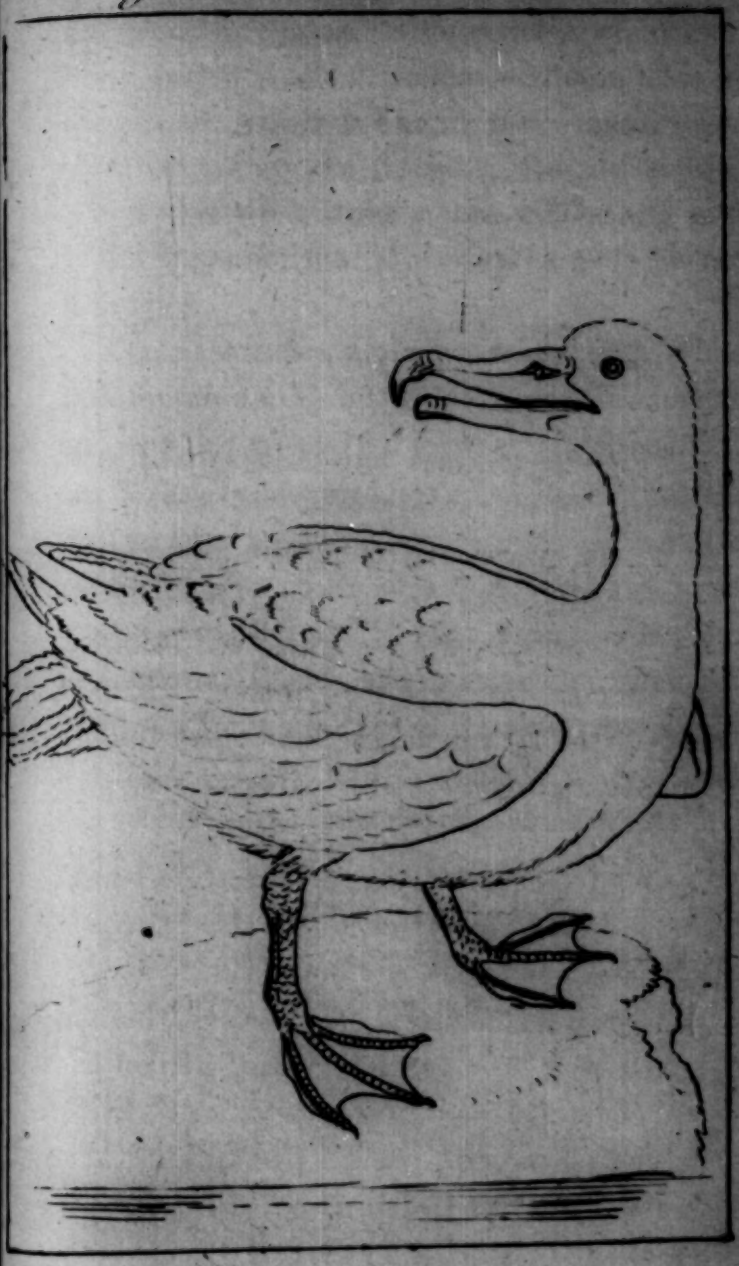
The noſtrils are oval, wide, opening forward, and on the ſides of the beak.

THE Albatroſs has long wings; and three toes, all placed forwards. It is found at ſea, in all the warm and temperate ſouthern climates. It flies exceedingly high, and feeds on Flying-fiſh, which, when purſued by Dolphins, riſe into the air to eſcape their enemy. The tail of the Albatroſs is round, and ſhort, not forked; its thighs are naked, and its wings exceedingly long.

The Albatroſs is larger than a Swan. Towards the end of June, Albatroſſes are ſeen in great flocks, in Kamſchatka, and the Kurile iſlands, a little ſouth of Kamſchatka. They come there for fiſh; and when they appear, the people know that there will be abundance; for large ſhoals of fiſh are always obſerved to come ſoon after the Albatroſſes. When they firſt come, they are very lean; but they ſoon become fat. They are very devouring

ORDER 3

Genus 31 Diomedea.



ALBATROSS.

Published Feb.ry 6. 1787 by Jos. Johnson St. Pauls Church Yard London.

BL

devouring birds, and deſtroy large quantities of fiſh: they will often ſwallow a Salmon of four or five pounds weight; but as they cannot take it all at once into the ſtomach, the tail will frequently hang out at the mouth. The bird in this ſituation cannot well fly away, and ſo is eaſily deſtroyed.

The Albatroſſes are often taken with a hook, baited with a fiſh, but not for food, becauſe they are very bad taſted; but for their inteſtines, which are blown up like bladders, and uſed as floats, to prevent the upper part of the fiſhing-nets from ſinking. The bones of the Albatroſs are made into needle-caſes and tobacco-pipes. They breed in Falkland's Iſlands, and in Patagonia. Patagonia is the moſt ſouthern part of the continent of South America. Their neſts are made of earth, upon the ground; they are round, about a foot high, and with a cavity or hollow upon the top. The eggs are very good food. It is remarkable, that the whites of their eggs do not grow hard with boiling. While the female ſits, the male is conſtantly on the wing, and ſupplies her with food; and they are then ſo tame, that they will ſuffer themſelves to be puſhed off the neſt, whilſt the eggs are taken from under them. Their eggs are often deſtroyed by a Hawk, who darts

down upon the neſt, the moment that the female Albatroſs leaves it, and flies away with an egg. The Albatroſs is often perſecuted by the Skua Gull. As ſoon as the young Albatroſſes leave their neſts, the Penguins take poſſeſſion, and hatch their young in the ſame neſt.

Genus 32. PENGUIN.

The bill is ſtrong, ſtraight, bending towards the point, furrowed on the ſides.

The noſtrils are linear, and placed in the furrows.

The tongue is covered with ſtrong ſpines, pointing downwards.

The wings are ſmall, and more like fins; covered with feathers no longer than thoſe on the reſt of the body, and uſeleſs for flying.

The body is covered with thick ſhort feathers, with broad ſhafts, and lying almoſt as cloſe together as ſcales.

The legs are ſhort and thick, and placed very much behind.

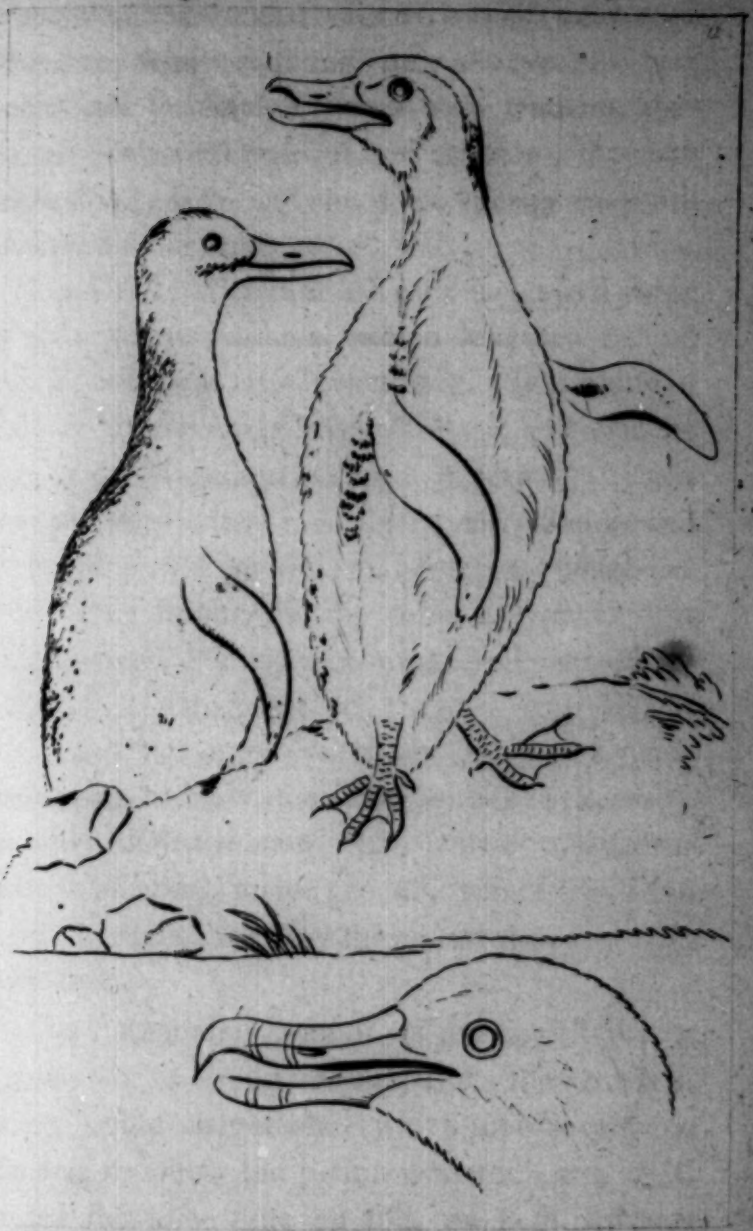
It has four toes, all placed forwards; the inner toe looſe, the other three are webbed.

The tail is very ſtiff, and conſiſts of broad ſhafts, ſcarcely webbed.

PENGUINS are found both in temperate and in cold climates to the ſouth. Whilſt they ſwim, their heads and necks only appear out of

ORDER 3

Genus 32



PENGUIN.

Published Feb.ry 6. 1787 by Jas. Johnson St. Pauls Church Yard London.

B L

of water; and they row themſelves forward with their finny wings, as though they were oars. Their bodies are ſo cloſely covered with feathers, that no wet can penetrate or get to them; they are beſides very fat; and by theſe means they are preſerved from cold.

The Creſted Penguin has over each eye a ſtripe of pale yellow feathers, which lengthen behind into a creſt, near four inches long. It is found in Falkland's Iſlands, and New Holland, and near the Straits of Magellan in South America. When they are angry, they raiſe their creſt. Sailors call them Hopping Penguins, and Jumping Jacks, becauſe they frequently leap three or four feet out of the water. They ſeem more lively than ſome other of the Penguins, yet they are very ſtupid; for ſometimes upon the ſhore they will ſuffer themſelves to be beaten down with a ſtick, or to be taken with the hand. The females make their neſts in burrows, under ground, which they form with their bills, and they throw out the earth with their feet.

The Patagonian Penguin is the largeſt that is known: it is found in Falkland's Iſlands. Mr. Bougainville caught one, which ſoon became ſo tame as to follow the perſon who took care of it. It fed for ſome time on fiſh, on fleſh, and on bread;

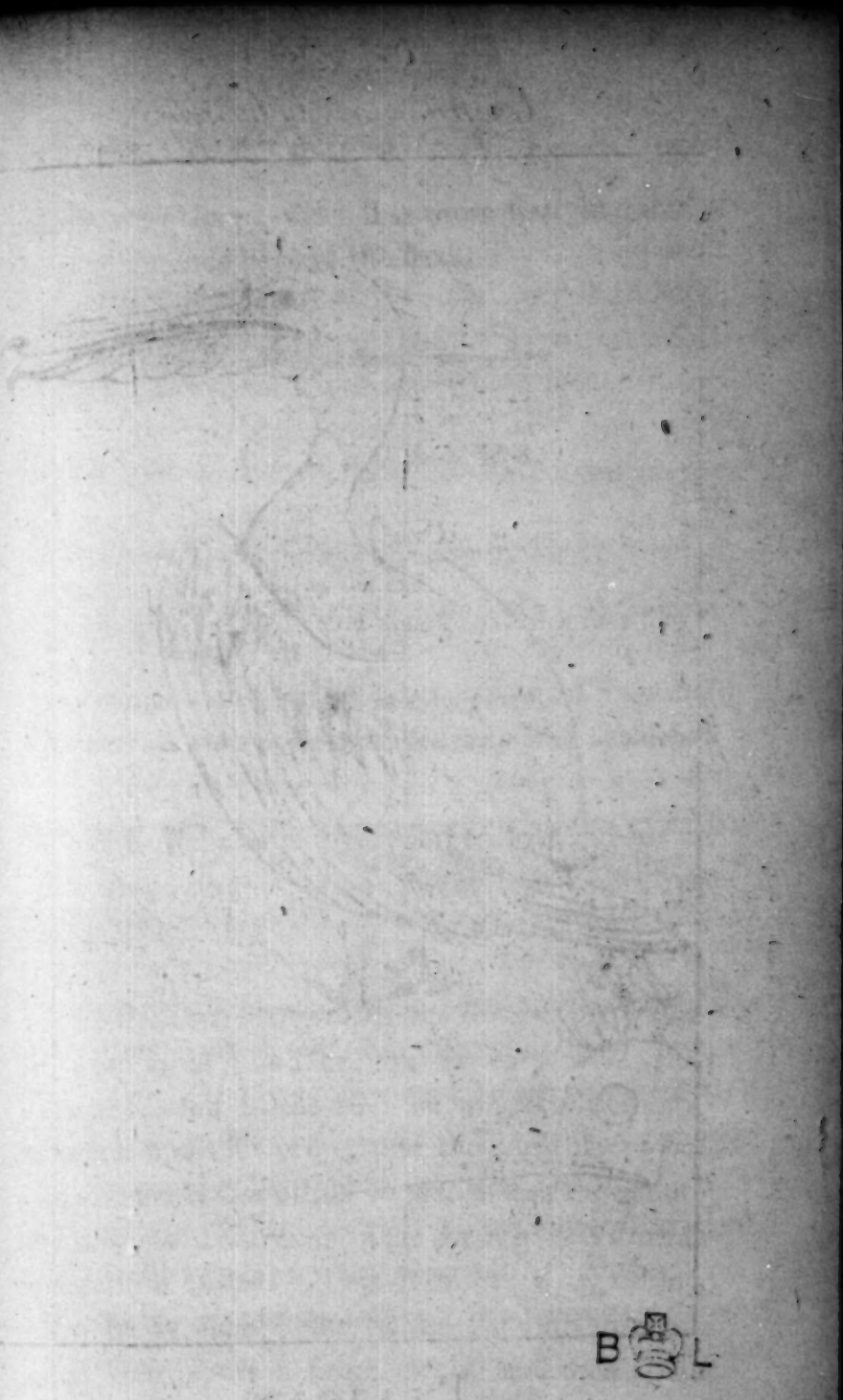
bread; but it ſoon pined and died. Its natural food is fiſh; and the remains of crabs, of ſhell-fiſh, and molluſcæ, (which are a kind of fiſh that are like jelly) were found in its ſtomach.

The Antarctic Penguin inhabits many parts of the South Sea. It is frequently found on iſlands, and mountains of ice, on which it makes ſhift to climb.

The Black-footed Penguin is found at the Cape of Good Hope. It ſwims and dives remarkably well; but on the land, it hops and flutters in a very aukward manner, and if hurried, it continually ſtumbles. It uſes its wings, or ſtumps, inſtead of legs, ſcreaming like a Gooſe. It climbs a little way up the rocks, to make its neſt, and uſes its bill to help itſelf up.

The Little Penguins are found in New Zealand. They make their neſts in burrows, under ground; and in ſome parts theſe hollows are ſo frequent, that thoſe who walk there are continually falling into holes up to their knees.

Linnæus divides the Penguins into two genera, or families. Some he places under the Diomedea: in theſe the under mandible ends abruptly, as though it were cut off, and the noſtrils are oval and wide. Others he places among the Phaeton: their noſtrils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ORDER 3.

Genus 33 Pelecanus.

PELICAN.

Published Febr. 1787 by Jos. Johnson St Pauls Church Yard London.

noſtrils are oblong, the bill is more ſtraight, and the gape extends beyond the beak.

GENUS 33. PELECANUS.

The Pelican's bill is long, ſtraight, ſtrong, hooked at the point, and has a nail at the end.

The noſtrils are ſmall, and almoſt concealed in a long furrow.

The fore part of the head is naked in moſt.

Each of the four toes are connected (or joined) by a web.

THE Pelican is a very large bird, and has a very remarkable pouch, or bag, under his bill, in which he can carry a conſiderable number of fiſh.

The Pelican is larger than the Swan: his wings are very wide; and he can fly very well, and balance himſelf in the air: he falls like lead in a moment upon his prey; and the violence of his fall, and the extent of his wings, ſtrikes the water, and diſturbs it ſo much, that the fiſh is ſtunned, and cannot eſcape. This is his way of fiſhing when he is alone; but when they fiſh in company, they form a large circle, and then come nearer together, making the circle leſs and leſs; and

and ſo incloſe the fiſh, and take them with very little trouble.

Theſe birds generally fiſh in the morning, or the evening, and chuſe thoſe parts where there are the greateſt number of fiſh. It is amuſing to ſee them ſkim juſt above the water, then riſe a little, and plunge with their bags half full of fiſh; then riſe with difficulty, and plunge again; and ſo continue until their large pouches be full: they then perch themſelves on the points of the rocks, and eat and digeſt their food at their leiſure; and ſtay there, ſeemingly ſtupid, all day, until the evening, and then they go to fiſh again.

Labat mentions, that ſome ſavages had tamed a Pelican; that they ſent him out in a morning, and that he would return with his pouch full of fiſh, which they made him throw out.

The feathers of the Pelican's neck are downy; on the back of the head they are longer, and form a kind of creſt; the eyes are ſmall, and placed in the middle of two large naked circles. His pouch will contain twenty pints of water, and is ſo large, that a man can put his arm into it, up to his elbow. There was a Pelican in the iſland of Rhodes, (which is in the Mediterranean Sea, near the coaſt of Turkey in Aſia) that uſed to walk about the town; and there was one in Bavaria,

Bavaria, which is in Germany, that lived there forty years, and was very tame, and ſeemed to be pleaſed with muſic.

Pelicans are found moſtly in warm countries. There are many in Africa; and in Siam, and China, (which are in Aſia;) they are found in America, in the Bay of Panama, and almoſt as far north as Hudſon's Bay. The inſide of the pouch of the Pelican is not warm like the ſtomach, and does not ſpoil the fiſh; and if the pouch be preſſed againſt the breaſt, he immediately throws up the fiſh: the Pelican for this purpoſe preſſes his pouch with his bill. The Pelican's neſt is near the edge of the water, and placed upon the ground; it is made of graſs, and deeply hollowed, and lined with ſoft graſs. If the Pelican be diſturbed whilſt ſhe is ſitting, ſhe takes her eggs out of the neſt with her bill, and drops them into the water; and when her fright is paſt, ſhe brings them back again. The Pelican is a great deſtroyer of fiſh, for he eats as many at one meal, as would ſatisfy ſix men. He can eaſily ſwallow a fiſh that weighs ſeven or eight pounds; and will ſometimes ſwallow rats. There was a tame Pelican that uſed to follow the fiſhermen to market, and if they did not make haſte to tie up his bag, he would quickly ſteal away part of their fiſh.

They

The ſkin of the Pelican's pouch is uſed to carry tobacco in, and ſometimes caps are made of it: the Siameſe twiſt it into ſtrings for muſical inſtruments; and the fiſhermen on the Nile uſe the lower mandible, and the pouch, to lade the water out of their boats. There is a wonderful contrivance in the Pelican; the air, which it takes in, paſſes under the ſkin. This makes the bird much lighter; and if the body be preſſed, one may feel the air eſcape from it between the fingers.

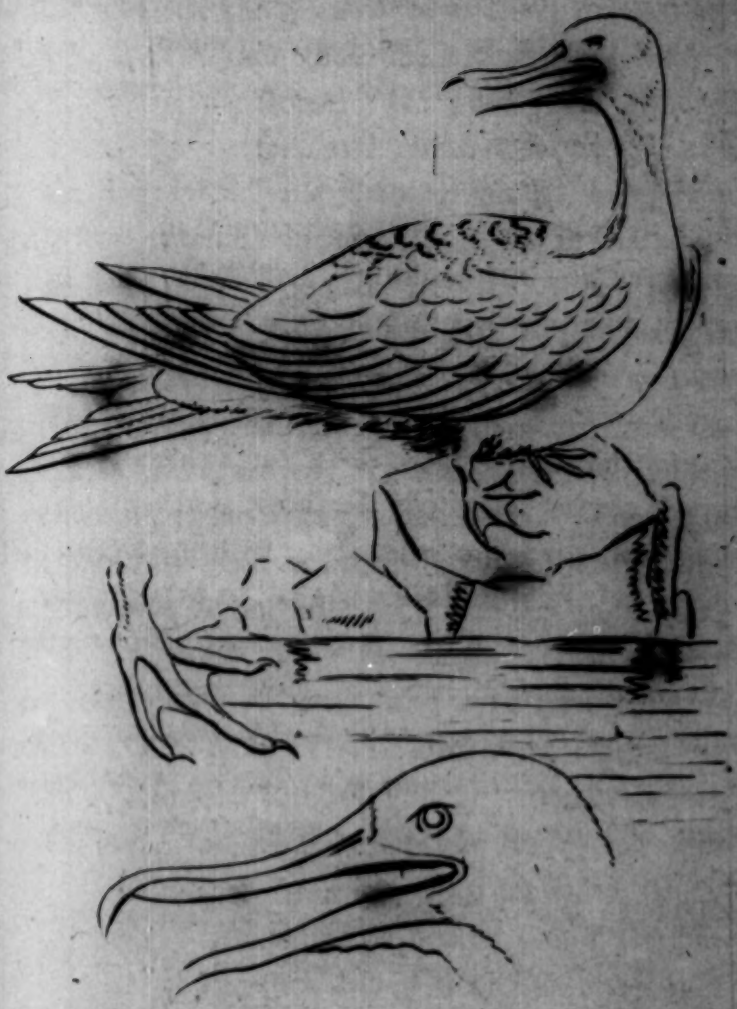
Pelicans will bring fiſh to any of their ſick or wounded companions. In ſome places, the natives confine one near the ſhore, and take part of the fiſh which the other Pelicans bring him.

One uſe of the Pelican's bag is, to bring water as well as fiſh for its young ones. When it builds upon a rock, it is ſaid, that it empties the water from its pouch into a hole near its neſt, and that the Camels and wild beaſts ſometimes come and drink the water, but that they never hurt the young.

The Man of War Bird is another kind of Pelican. It flies further and ſtronger than any water bird: it ſeems to poize itſelf upon its wings, which are of a prodigious length, without appearing to move. It ſails ſmoothly along the air, waiting

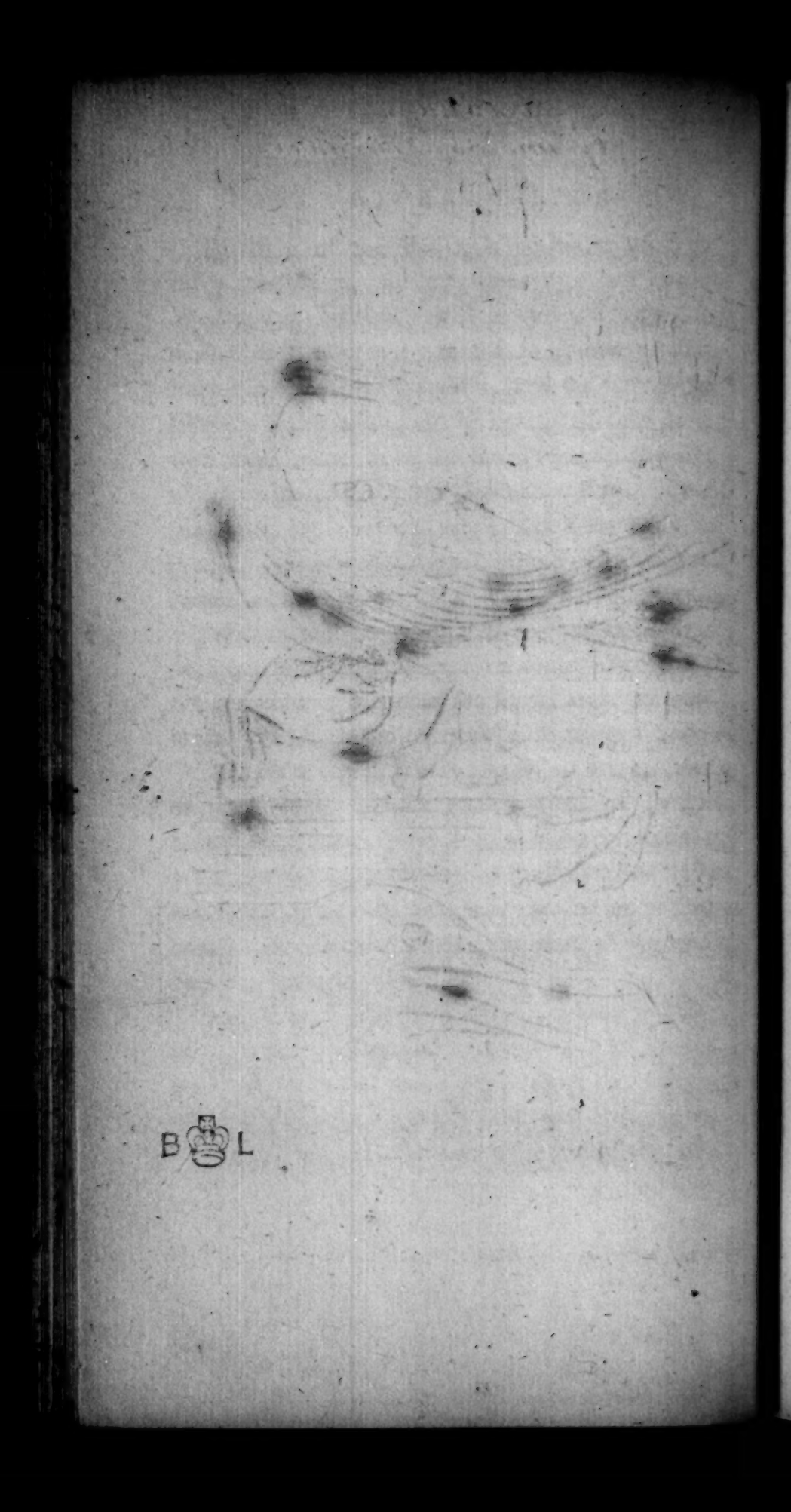
ORDER 3

Genus 33 Pelecanus.



MAN of War Bird.

Published Feby 6 1787 by Jos. Johnson St Pauls Church Yard London.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waiting for the moment of darting upon its prey ſwift as an arrow: and when the weather is moſt tempeſtuous, the Man of War Bird, light as air, raiſes itſelf higher than the clouds, and finds a calm above the ſtorm. He goes ſome hundred leagues out to ſea, and without ſettling, paſſes over a greater ſpace than he can fly through in the day; for he continues his flight in the night, and ſtops only where his prey is in the greateſt abundance. The flying fiſh out at ſea, ſwim in ſhoals; and with their fins, which they can uſe as wings, they riſe into the air, to eſcape from the Bonitos and Dorados: theſe are larger fiſh, which purſue, in order to prey upon them. The Man of War Bird perceives theſe ſhoals from afar, and catches the flying fiſh whilſt they are in the air; or as he ſkims along the ſurface, ſeizes them ſometimes with his beak, and ſometimes with his claws. The Man of War Bird often obliges the Booby (a ſmaller kind of Pelican) to provide him with food; for when he ſees the Booby, he flies after him, and ſtriking him with his wing, or his beak, obliges him to let fall, or to vomit the fiſh he has taken, and the Man of War Bird catches it before it reaches the water.

A gentleman ſaw in the Iſland of Aſcenſion, (which is in the Atlantic Ocean) a vaſt number of

of Man of War Birds: one attempted to take a fiſh out of his hand; at the ſame time, a great number flew juſt over the pot, in which the meat was boiling, to take it away, though many people ſtood round it.

Though the Man of War Bird's body be but little larger than that of a Hen, his wings are from eight to ten, or even fourteen feet acroſs. Theſe prodigious wings enable him to take ſuch vaſt flights; for ſometimes in the middle of the ſea, the ſailor ſees no other object than this bird. But their long wings make it very difficult for them to riſe, when once they have ſettled; ſo that they will ſometimes ſuffer themſelves to be ſtruck down, before they attempt to fly. Indeed it is only from the point of a rock, or the top of a tree, that they can eaſily riſe. They build their neſts in trees, in lonely places, near the ſea; and lay one or two eggs. Their heads are ſmall, and rather flatted on the crown; their eyes are large, black, and ſhining, and ſurrounded with a bluiſh ſkin, and their tails are forked like a Swallow's. The fat of this bird is thought to be very uſeful in curing the rheumatiſm.

The Cormorant is another bird of the Pelican kind, nearly as large as a Gooſe. It ſwims and dives

dives very well. It is a great deſtroyer of fiſh. Its feathers are of a blackiſh colour, gloſſed with green.

The Cormorant is ſo greedy, and fiſhes ſo well, that he deſtroys more than a flock of ſome other birds: as he can dive for a long time, and ſwims under water ſwift as an arrow, his prey ſeldom eſcapes him: he is often obliged to throw it up into the air, and he catches it ſo as to ſwallow the head firſt, that he may not be hurt by the fins.

In China, they teach the Cormorant to fiſh: they put a ring round his neck, to hinder his ſwallowing, and he brings the fiſhes as faſt as he catches them to his maſter. When his maſter has enough, he takes away the ring, and lets the Cormorant fiſh for himſelf.

There are Cormorants on the lake Baikal, and in Kamſchatka, in Siberia. They ſleep in great numbers upon the crags of rocks; ſometimes they fall off in their ſleep, and then they are devoured by the foxes, who are watching for them. The Cormorants here, are ſo very ſtupid, that the people of Kamſchatka often take them by a knot, that ſlips, which they endeavour to throw over their heads; the ſilly bird only moves his head on one ſide, until he is caught, but never attempts to fly away.

The

The Shag is another bird of the Pelican kind, ſmaller than the Cormorant. Its bill is toothed on the edges, on each ſide, like a ſaw; it has a creſt two inches long, and all the feathers of the upper part of its body are of a bright green, edged with a purple caſt.

Shags build, like the Cormorant, on trees, and can perch upon them; they ſwim with the head quite upright, and are very difficult to be ſhot, becauſe they dive under water upon ſeeing the flaſh of the gun. Shags are found on the coaſt of Cornwal, and near the Iſle of Man, and on the coaſt of Pruſſia. Mr. Forſter (who went round the world with Captain Cook) found them in the cold iſlands in the ſouth. In theſe frozen climes they make their neſts on the cliffs which jut out over the ſea, or amongſt the tufts of that long graſs, which is almoſt the only plant that grows there; and having never been diſturbed by men, they did not fly away when a gun was fired; they were ſo far from being afraid, that they ſuffered themſelves to be beaten down with ſticks.

The Gannet, or Soland Gooſe, is another bird of this kind. It is as large as a Gooſe; the ſides of its beak are jagged, that it may hold the fiſh the better; it has no noſtrils, unleſs they be placed in a long furrow, which reaches almoſt to the end

of the bill. A naked blue ſkin ſurrounds the eye, and from the corner of the bill to the back of the head, there is a narrow ſtripe of black ſkin, without feathers. It has a pouch, large enough to contain five or ſix herrings.

It ſits only on one egg; if that be taken, it will lay another, and if that be taken, a third. The neſt is large, and made of ſhavings, or ſea-weed. Gannets are found on an iſland in the Firth of Clyde, in Scotland; in the Orkney iſlands; and in many iſlands on the Engliſh coaſt; and on the Baſs iſland, which is in the Firth of Forth, in Scotland.

In that iſland, which is ſcarcely a mile round, ſo many of theſe and other ſea-birds build every year, that it is difficult to walk without treading upon their eggs or the young birds; and the number of the old birds is ſo great, that they darken the air like a cloud. If you ſtand on the rock, and look down upon the ſea, it ſeems covered to a great diſtance with birds of ſeveral kinds, ſwimming about, or ſeeking for their prey.

If you ſail round the iſland, every cliff of the rock is covered with birds, in ſuch numbers, that they cannot be counted; and they make ſuch a noiſe, that thoſe who ſpeak there, can ſcarcely be heard.

The

The rocks of St. Kilda (an iſland on the weſtern coaſt of Scotland) abound with theſe birds; the inhabitants live upon them and their eggs; they take them in the ſame manner as the bird-catchers in Norway, by climbing among the rocks, or being let down by ropes.

Fiſhermen know when ſhoals of Herrings or Pilchards are near, by the Gannets, who always attend them; for Herrings and Pilchards are their chief food. They ſeldom fly over the land, but wind all along the coaſt, at an equal diſtance from the ſhore.

The Gannet can cover its eye with a membrane, or ſkin, to prevent it from being hurt; for the Gannet darts headlong with ſurprizing ſwiftneſs into the water after the fiſh.

Sometimes fiſhermen tie a Pilchard to a board, and let it float on the ſea; and the Gannet will fly down, and ſtrike it, with ſo much force as to break its neck.

The Booby is another ſpecies of Pelican. Birds of this ſpecies are called Boobies, becauſe of their great ſtupidity, and the habit which they have of ſhaking their heads; and becauſe they ſuffer themſelves eaſily to be caught, or to be beaten down with a ſtick; for they do not ſeem to be at all afraid of man. One cauſe perhaps of their

ſeeming

ſeeming ſtupidity, may be the difficulty they have of beginning to fly; their wings are ſo long, that they cannot eaſily riſe from the ground.

The Booby is frequently purſued by the Man of War Bird, for the ſake of his prey. The Booby lets the fiſh he has taken, fall from his beak, or throws it up from his ſtomach, the moment he is attacked, and the Man of War Bird catches it before it reaches the water. The poor Booby goes to fiſh again, and is perhaps again deprived of his prey: for though he can fly a long time, and very ſwiftly, the Man of War Bird can fly ſtill longer, and more ſwiftly. The Boobies ſeldom go very far from land; and ſailors, when they ſee them, think that they are at no great diſtance from ſome ſhore. The four toes of the Booby are united by one membrane, and the nail of the longeſt toe is toothed like a ſaw.

They frequently alight upon ſhips, whilſt they are at ſea, and ſuffer themſelves to be taken. Boobies are found in almoſt every climate. Some people have been ſo ſilly as to imagine, that they hatch their egg by covering it with their foot. Their ſkin does not grow to their body, but is faſtened by little fibres placed here and there, ſo that they ſometimes puff it out like a bladder,

and this enables them to ſupport themſelves more eaſily in the air.

GENUS 34. PLOTUS.

THE ANHINGA, OR DARTER.

The Darter's beak is ſtraight, ſharp at the point, and toothed.

Its face is covered with feathers *.

Its feet palmated, or all the four toes connected.

IT is found in South America, and in Africa. Like a ſerpent, it draws in its very long neck, and then darts out its beak at the fiſh upon which it feeds. Its head is thickly covered with ſhort, velvet-like feathers. It is a very wild bird, and frequently perches itſelf, notwithſtanding its webbed feet, on the tops of trees, by river ſides, or near ſavannahs that are overflown. (A ſavannah is a large open meadow.) Darters build their neſts on trees. They are moſtly fat, but the fleſh is oily, and bad taſted.

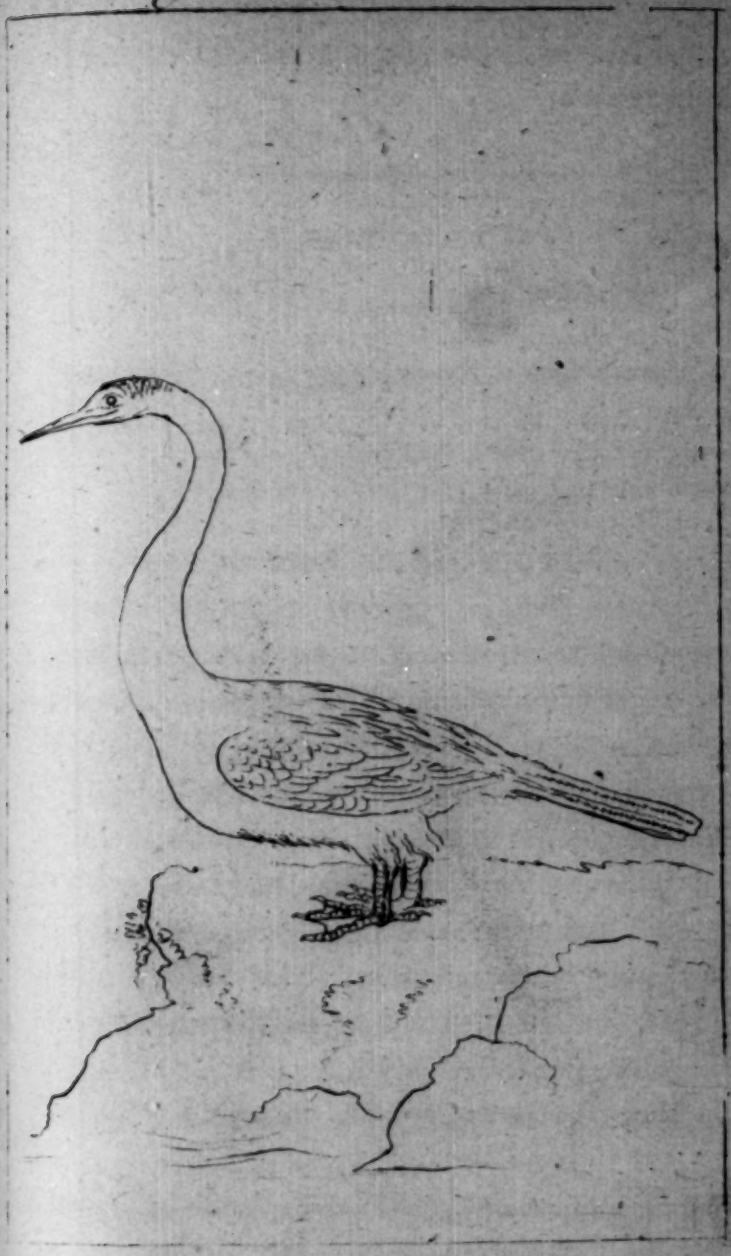
The very great length of the neck is not all that is remarkable in its appearance; for it has a large

* It is ſaid, that one ſpecies of the Darter has its face and chin bare of feathers.

and

ORDER 3

Genus 34 Plotus.



DARTER.

Published Feb.1.6. 1787 by Jon. Johnson St. Pauls Church Yard London.

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Genus 35 Phaeton.

Tropic Bird.

and wide tail, of twelve ſpreading feathers. It ſwims very well, ſometimes with the head only out of water, and on the leaſt appearance of danger, dives entirely under.

GENUS 85. PHAETON.

THE TROPIC BIRD.

The beak is compreſſed, ſtraight, or ſlightly ſloped, and ſharp at the point. The gape reaches beyond the bill, which is red, and jagged.

The noſtrils are oblong.

The hind toe turned towards the toe before.

THE Tropic Bird is one of the Phaeton kind. It is called the Tropic Bird, becauſe it is generally found in thoſe climates which lie between the tropics, (that is, which are the hotteſt.) Its feet are palmated, that is, the toes are all joined by one web, and it can reſt upon the water with them; in this it is like the Cormorant and the Booby, and like them it can rooſt upon trees.

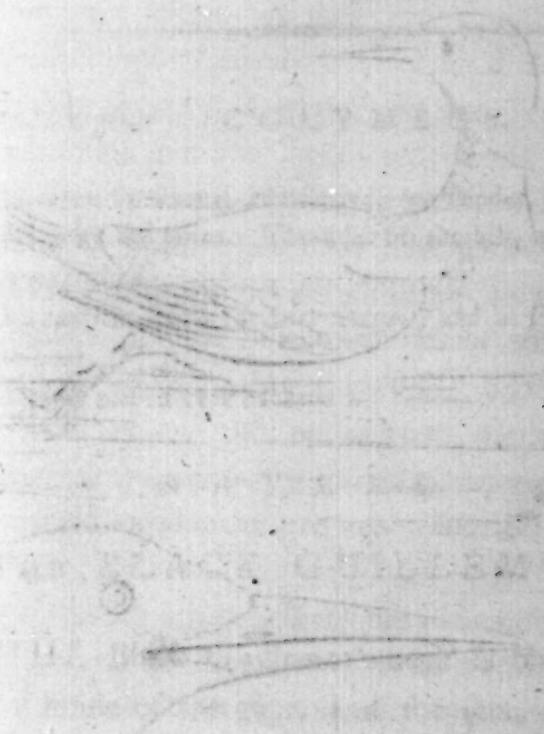
It is about the ſize of a Pigeon, but it is very remarkable for two long feathers in its tail, near

two feet long. In Otaheite, (an iſland in the South Sea, viſited by Captain Cook) the people uſe theſe feathers to ornament their warriors; and in the Caribee Iſlands, of America, the ſavages put them through the griſtle of the noſe, to make themſelves appear more handſome, or more frightful.

Mr. Leguat ſays, that in one of his voyages the Tropic Birds were exceedingly troubleſome to the ſailors, and frequently flew away with their hats. They lay two eggs, and live upon fiſh.

Sometimes they fly to a prodigious height, and they are often ſeen with the Man of War Bird, and Boobies, purſuing the Flying-fiſh as they riſe out of the water, to eſcape from the Dolphins and Bonitos. Sometimes they reſt on the ſurface of the water; and when the weather has been calm, they have been ſeen perched on the back of drowſy Tortoiſes, as they have been floating on the ſea.

They breed in the woods, on the ground, under trees. They have been found on the iſlands of St. Helena, and Aſcenſion, in the Atlantic Ocean; and of Mauritius, near Africa, and in New Holland, and many places in the South Seas. In Palmerſton Iſland the trees were quite loaded with them; and they were ſo tame, as to ſuffer themſelves



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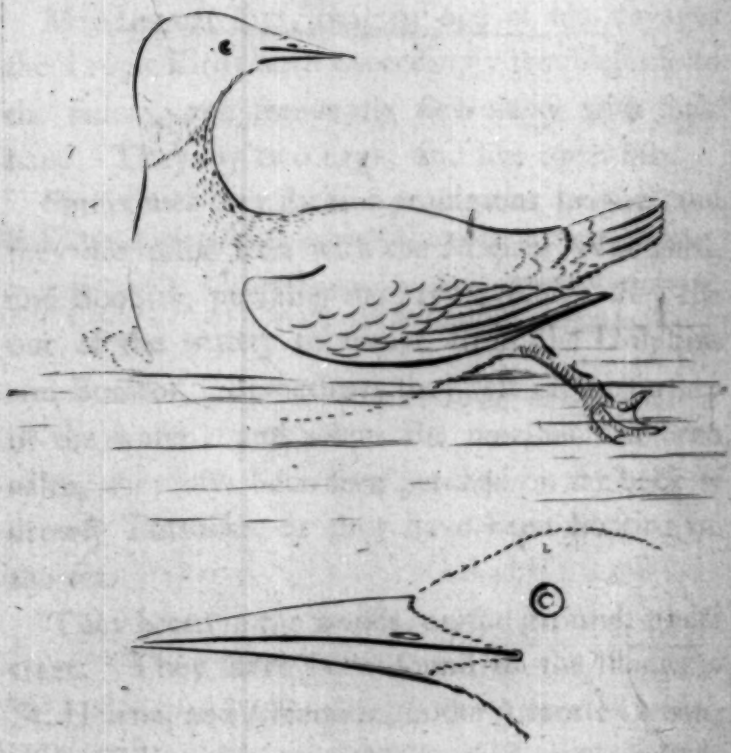
Genus 36 Colymbus.



GUILLEMOT.

Published Feb.ry 5. 1787 by Jos. Johnson St. Pauls Church Yard London.

ſelves to be taken off the boughs with the hand. They ſhed the long feathers in their tails every year.

Linnæus places one of the ſpecies of the Penguins under the Genus Phaeton; but this has been deſcribed before, under the Genus Penguin.

GENUS 36. COLYMBUS.

The beak is ſtrong, awl-ſhaped, (or ſlender,) ſtraight, and ſharp at the point. The ſides of the bill, and of the tongue, ſerrated.

The noſtrils linear (or very narrow) and at the bottom of the beak.

The feet placed very backward.

GRYLLE.

THE BLACK GUILLEMOT.

THE Black Guillemot's beak is black, the inſide of the gape, and the feet, are red; the ſtomach of the female is white. The young are ſpotted the firſt year with black and white.

It is very difficult to be ſhot, for the moment it ſees the flaſh of the gunpowder, it dives. It

makes its neſt a great way under ground, and lays but one egg.

The Black Guillemot is found in Caernarvonſhire, and in many of the iſlands near Great-Britain. In the winter, its head, neck, and the upper part of its back, grow white.

COLYMBUS TROILE.

THE FOOLISH GUILLEMOT.

The Fooliſh Guillemot has a ſmall proceſs, or knob, near the end of the lower mandible; and ſhort, ſoft feathers on the upper part of the bill. It is very common on the Engliſh coaſts, on rocky cliffs.

Theſe Guillemots are very ſilly birds; for though they ſee their companions killed, one after another, they only make a little circuit in the air, and alight again on the ſame places: ſo that many people go out to ſhoot them, to learn the art of ſhooting flying.

The inhabitants of Kamſchatka kill them for food, though they be very ill taſted. Their eggs are eſteemed a delicacy, and their ſkins are ſewed together for garments.

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ORDER 3

Genus 36 Colymbus.

DIVER.

Published Feb:6. 1787 by Jos. Johnson St Pauls Church Yard London.

COLYMBUS ARCTICUS.

The Black-throated Diver, or Lummé, walks very aukwardly upon the land, but it very ſeldom comes aſhore. The neſt of this ſpecies is rarely ſeen: ſome have thought that it hatches its eggs under its wing, but this is not likely. The back is black, with little ſquares of white: it has a thick down upon its ſkin, like the Swan: and the Laplanders and inhabitants of Sweden dreſs their ſkins, and make gun-caſes and winter-caps of them. Theſe Divers are remarkably fond of their young: when they are able to leave the neſt, both the parents take them to the water; one flies above, to guard them from birds of prey, and the other below, to receive the young in caſe of their falling. If, notwithſtanding this care, the little ones ſhould drop upon the land, the old ones do not forſake them, but rather riſque the being devoured by Foxes, which in thoſe cold countries, where they have ſo little food, are conſtantly watching for birds.

They take great pains to teach their young to ſwim and to dive; they carry them ſometimes in their beak from rock to rock, and they defend them from birds of prey, under their wings, as a hen does her chickens.

The Black-throated Diver is frequent in the lakes of Siberia, in Iceland, Greenland, and the Ferroe Iſlands. It is very noiſy juſt before rain.

Divers ſwim, and dive ſo well, that they are very difficult to be ſhot; for the moment they ſee the flaſh of the gun, they plunge under water. For this reaſon, thoſe who go to ſhoot them fit a piece of paſteboard to the gun, ſo as to hide the flaſh.

They move under water with great eaſe and ſwiftneſs: it is there they retire for ſafety, either from the gun of the fowler, or from birds of prey. But even there they are not ſafe from the contrivance of man; for they are frequently caught by hooks, to which a little fiſh is fixed.

Divers build their neſts upon the water, amongſt ruſhes, and their neſts are always wet.

There are ſeveral kinds of Divers. The Speckled Diver is frequent in England. In the river Thames, the fiſhermen call it the Sprat Loon, for they are ſeen in great numbers where there are ſhoals of Sprats.

If any body approach the neſt, the old bird immediately plunges into the water, and the young ones, though juſt hatched, endeavour to follow her.

The Imber is another Diver. It inhabits the ſeas about the Orknies and the Ferroe Iſlands, and

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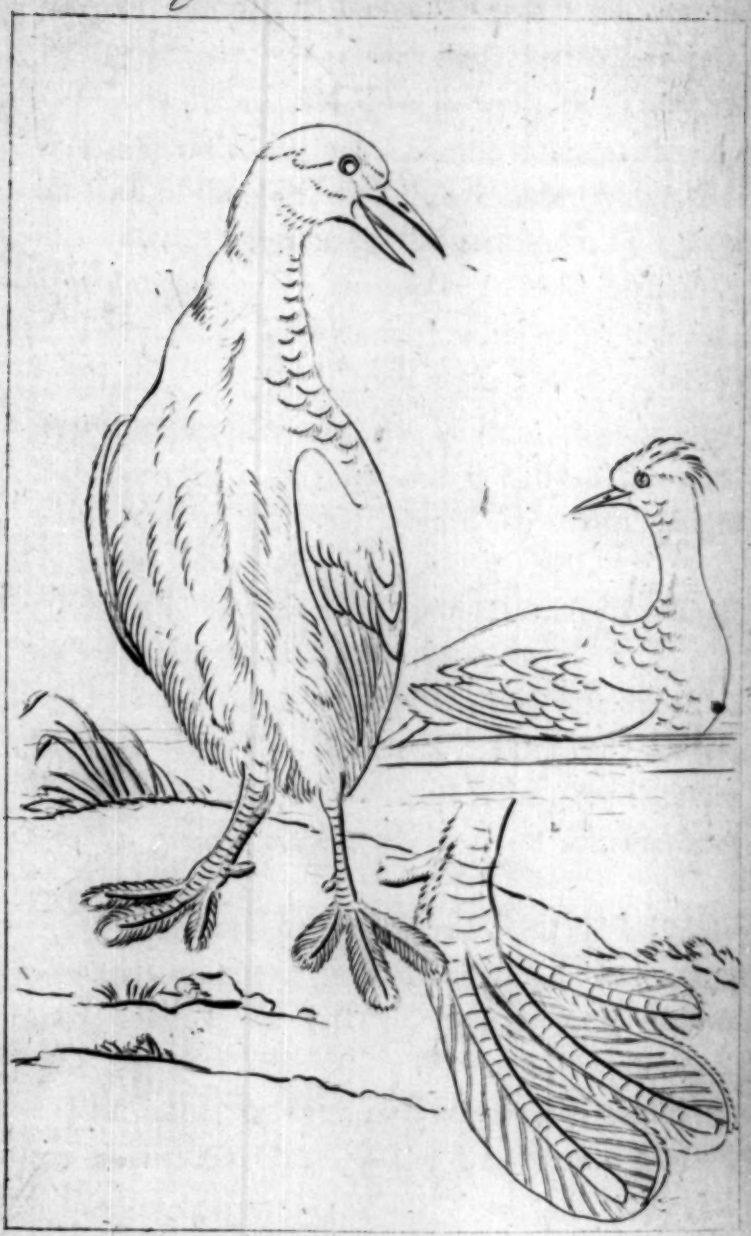
Genus 36 Colymbus



GREBES.

Published Feb.6.1787 by Jos. Johnson St. Pauls Church Yard London.

and Iceland, and moſt of the northern parts of Europe. It is found too in Switzerland, on the lake of Conſtance.

COLYMBUS CRISTATUS.

THE GREBE.

Grebes are eaſily diſtinguiſhed by their beautiful tufts, of a ſilvery white, which are ſoft as down, elaſtic as feathers, and gloſſy as ſilk.

Their plumage, particularly that of the breaſt, is a cloſe beautiful down, which neither admits moiſture or cold; and ſuch a covering is very neceſſary for them, as they are conſtantly on the water, even in the coldeſt winters.

Their legs are placed very far backwards, and are very unfit for walking, ſo that they never come to land, if they can avoid it; and for that reaſon, they generally ſwim againſt the wind. If by accident the waves ſhould carry them on the ſhore, they remain there, in vain attempting with their wings to fly; for, from the ſituation of their legs, theſe efforts only throw them forwards. In this ſtate they are often taken, though they defend themſelves, by ſtriking very violently with their beaks.

But in the water, the Grebes are remarkably active: they ſwim, dive, cut the water, and run upon the ſurface, ſkimming the waves with aſtoniſhing ſwiftneſs. It is ſaid, that they never move more ſwiftly than when they are under water: they dive after fiſh to a prodigious depth. The fiſhermen often take them in their nets.

Grebes frequent both the ſea and freſh-water lakes. When they build their neſts in the hollows of rocks, they muſt fly into them, becauſe they cannot climb: and their little ones, when they leave the neſt, muſt fall into the water.

Upon lakes, the Grebe builds a floating neſt: it is always wet, but it cannot be carried away by the ſtream, becauſe it is fixed amongſt the reeds. The neſt is formed of water-plants, of the ſtalks of the water-lily, pond-weed, and water-violets.

The old Grebe feeds the young ones with eels, and will carry them, when they are tired, on her back. Muffs and tippets are made of the feathers of their breaſts, which are very white and gloſſy, and ſoft and warm.

There are many kinds of Grebes, and they are of very different ſizes. One is called the Great Creſted Grebe: this is found on the lakes of Shropſhire and Cheſhire, and on the fens of Lincolnſhire.

The

The Eared Grebe is found in the northern parts of Europe, in Iceland, and in Siberia (Siberia is in Asia). It is found too in Falkland's Islands (Falkland's Islands are near the coast of Patagonia, in South America).—The Tippet Grebe is found on the lake of Geneva, and in many parts of Europe.

The Guillemots, the Divers, and the Grebes, all belong to the genus of Colymbus.

But there is this difference—

The Guillemots have three toes, all placed forwards.

The Divers have four toes: the outer toe is the longest; the back toe is small, and joined to the inner toe by a small membrane.

In the Grebe, the toes are furnished on each side with a broad plain membrane.

GENUS 37. LARUS.

THE GULL.

The bill is ſtrong, ſtraight, cultrated, bending at the point: on the under part of the lower mandible there is an angular prominence (or knob).

The noſtrils are oblong and narrow, wider before, and placed in the middle of the bill.

The tongue is a little bifid, or divided.

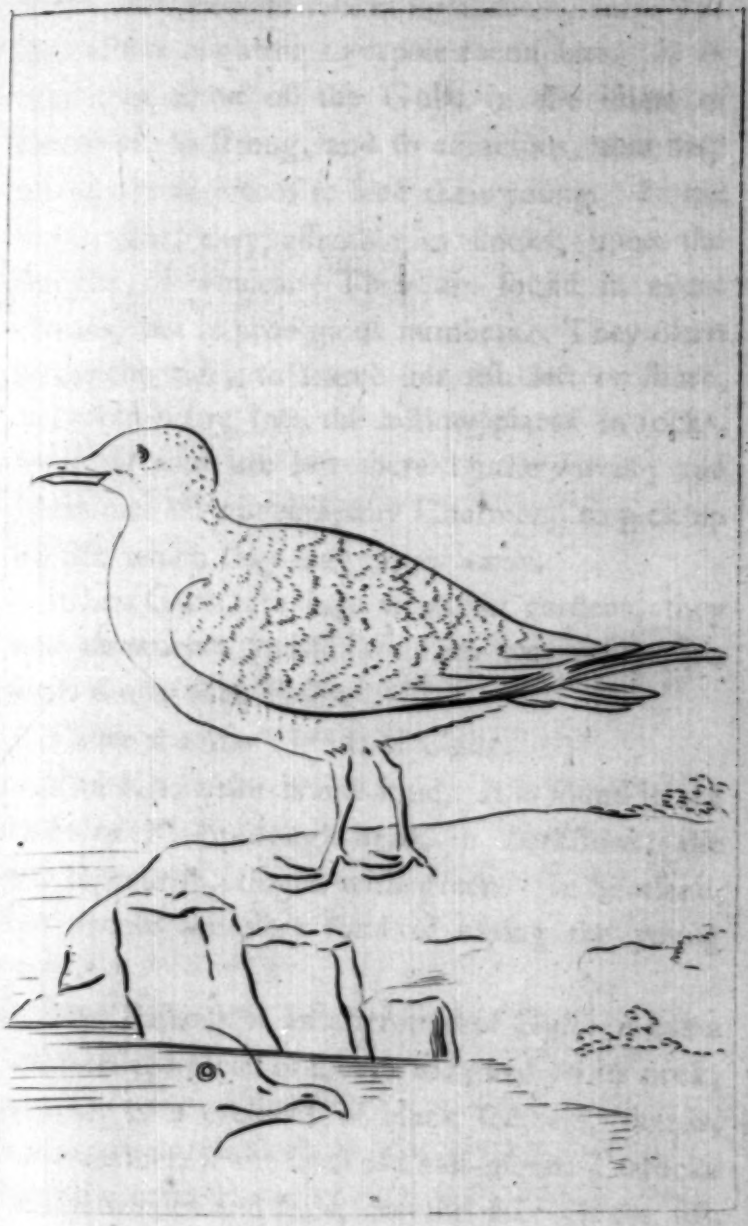
The body is light, and the wings are long.

The back toe is ſmall.

GULLS are very noiſy, and very voracious. They may be called the Vultures of the Sea, for they devour the dead bodies, of all kinds, that float on its ſurface, or that are thrown on the ſhore. Like other birds of prey, they can faſt a conſiderable time. They are very rapacious, and are ſometimes caught with a hook, baited with a fiſh. The three toes before are joined by one web, and they carry their heads almoſt between their ſhoulders. They run very faſt upon ſhore, and ſkim lightly over the waves. They often cover the ſands and the rocks with their number, and make them re-echo with their

ORDER 3

Genus 37 Larus.



GULL.

Published Feb.26.1787 by Jos. Johnson St. Pauls Church Yard, London.

cries: they ſeem to ſwarm upon them, ſome flying, others alighting to repoſe themſelves. It is ſaid, that ſome of the Gulls in the iſland of Ferroe are ſo ſtrong, and ſo voracious, that they tear lambs to pieces to feed their young. In the frozen ſeas, they aſſemble in flocks, upon the carcaſes of whales. They are found in every climate, and in prodigious numbers. They often follow the tide, to ſearch for fiſh left on ſhore, and often retire into the hollow places in rocks, for thoſe that are left there by the waves; and ſometimes they accompany fiſhermen, to pick up the fiſh which they may throw away.

When Gulls are kept tame, in gardens, they feed on worms and ſnails: they can eaſily pick ſnails out of their ſhells.

There are many kinds of Gulls.

The Kittiwake is one kind: it is found in the cliffs of Flamborough-head, in Yorkſhire: the bill is yellow, tinged with green. In Scotland, the people are very fond of eating the young ones.

The Tarrock is another kind of Gull: it has a knob only, inſtead of a back toe; and on its neck, behind, is a creſcent of black feathers, that is, black feathers in the form of a half-moon. Tarrocks attend whales and ſeals, for the ſake of the fiſh which

which the Seals drive before them into ſhallows. The Tarrocks then dart ſuddenly upon them, and make them their prey.

The Black-toed Gull is found in Denmark. Sometimes it endeavours to conceal itſelf among cattle: it may then be taken by the hand, perhaps becauſe it may have been tired by a long flight.

The Winter Gull is very common in England, and is found farther inland than many others. It feeds very much upon worms, and frequents meadows far from the ſea. There is a ſubſtance, very much like jelly, often found in moiſt places; it is call'ed ſtar-ſhot, and ſometimes ſtar-jelly: this is nothing but worms, that have been in the ſtomach of the Winter Gulls, or of ſome other bird, and which they have thrown out, perhaps, becauſe they may have eaten too much, as Vultures ſometimes do.

The Laughing Gull is found on the river Don, in Ruſſia, and in ſome parts of America. It makes a noiſe like a loud laugh.

The Black-headed Gull makes the ſame kind of noiſe: it is found in Lincolnſhire, and in Cambridgeſhire: it builds its neſt on the ground. In the Winter, Black-headed Gulls are ſeen at Aleppo (which is in Turkey in Aſia) in great

numbers. They are ſo tame, that they will come when they are called from the terraces of the houſes, and they will catch pieces of bread in the air, which are thrown up to them.

The common Gull is found on our ſhores in moſt parts of Europe, on the Caſpian Sea, (which is in Aſia,) and in many parts of America. It breeds on rocks and cliffs: it picks up worms, and ſmall fiſh which are left by the tides; and often follows the plough, in fields that are near the ſhore, to feed upon the worms and inſects that are thrown upon the ſurface, particularly the larvæ, or grubs, of the Cockchafer.

The Glaucous Gull is called by the Dutch, Burgmeiſter, becauſe it purſues and beats away many other kinds of ſea-fowl. It builds its neſt on high cliffs, and preys on dead Whales. It attends on the Walruſſes, in order to feed on what they leave behind; and it will deſtroy the young of the Razor-bill.

The Herring Gull lives very much upon Herrings, and ſometimes is ſo bold as to take them out of the nets, almoſt cloſe to the fiſhermen.

The Great Gull lays its eggs on the ſand, without preparing a neſt.

The Arctic Gull is very common on the Weſtern Iſlands of Scotland, and breeds on the heath,

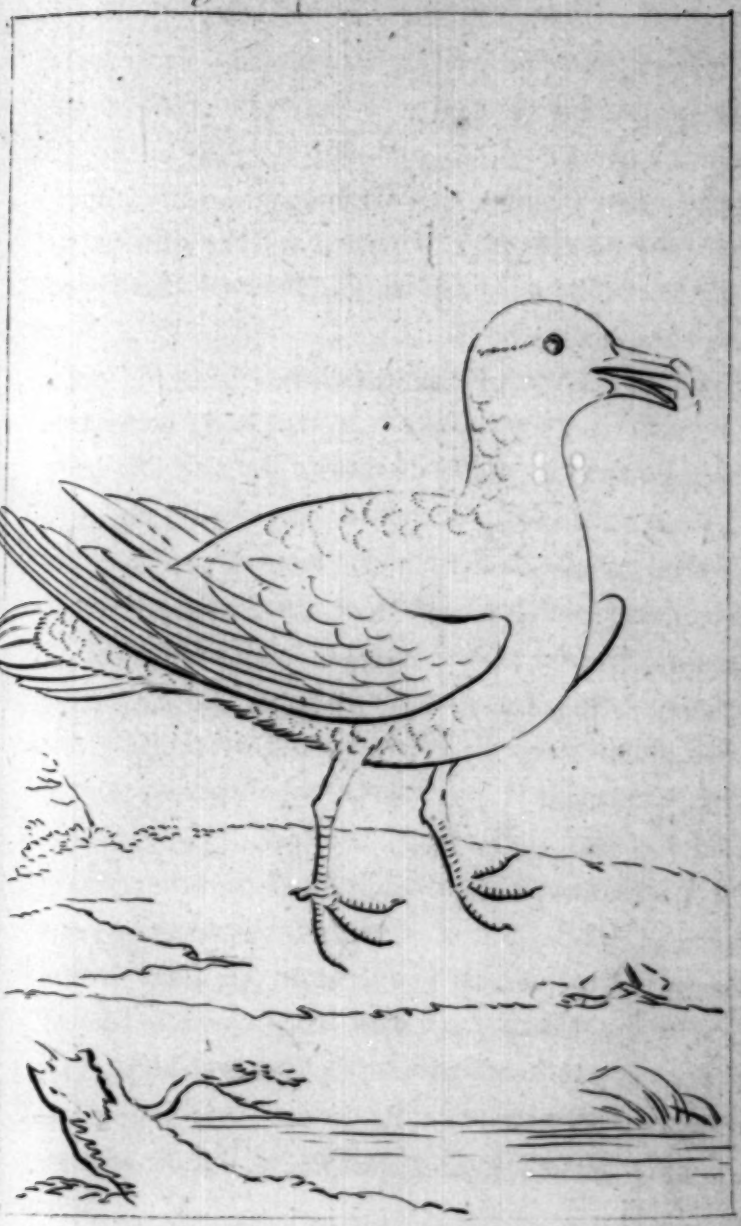
heath. When disturbed, it flies about like a Lapwing, but soon alights. The female makes a nest with grass and moss, on a hillock, in a marshy place, and lays two eggs. It does not often swim; but the Arctic Gull, and the Wagell Gull, fly after other Gulls, and frighten them so much that they vomit up (through fear) the fish which they have taken, and these Gulls catch them before they reach the sea.

But of all the Gulls, the Skua is the largest. The bill is very hooked at the end, and very sharp: it has a cere over more than half the bill. (The Arctic Gull too has a cere.) Its legs are covered with black scales, and its talons are strong and crooked. It feeds on fish, and on all the smaller kind of water-fowl. The Skua Gull is very bold; for it will fly after Eagles, and drive them away. In the Orknies, the inhabitants are very fond of them, because they prevent Eagles from destroying the poultry. It not only preys on the lesser Gulls, and on other birds, like the Hawk, but it often attacks them on the wing, like the Arctic Gull, to make them throw up the fish which they have swallowed. It will fly with great fury upon those who are so cruel as to attempt to rob it of its young. It builds its nest amongst dry grass; and whilst building, it is

very

ORDER 3

Genus 37



SKUA GULL.

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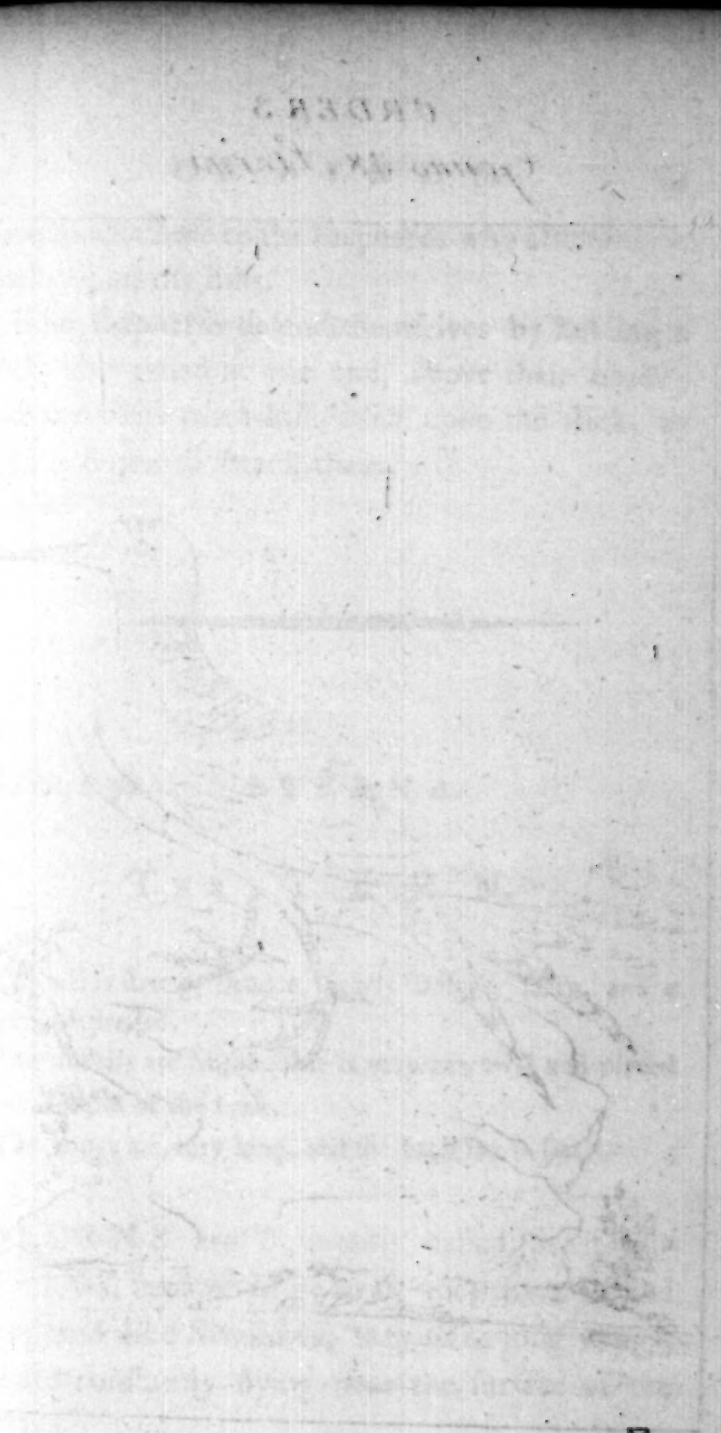
B L



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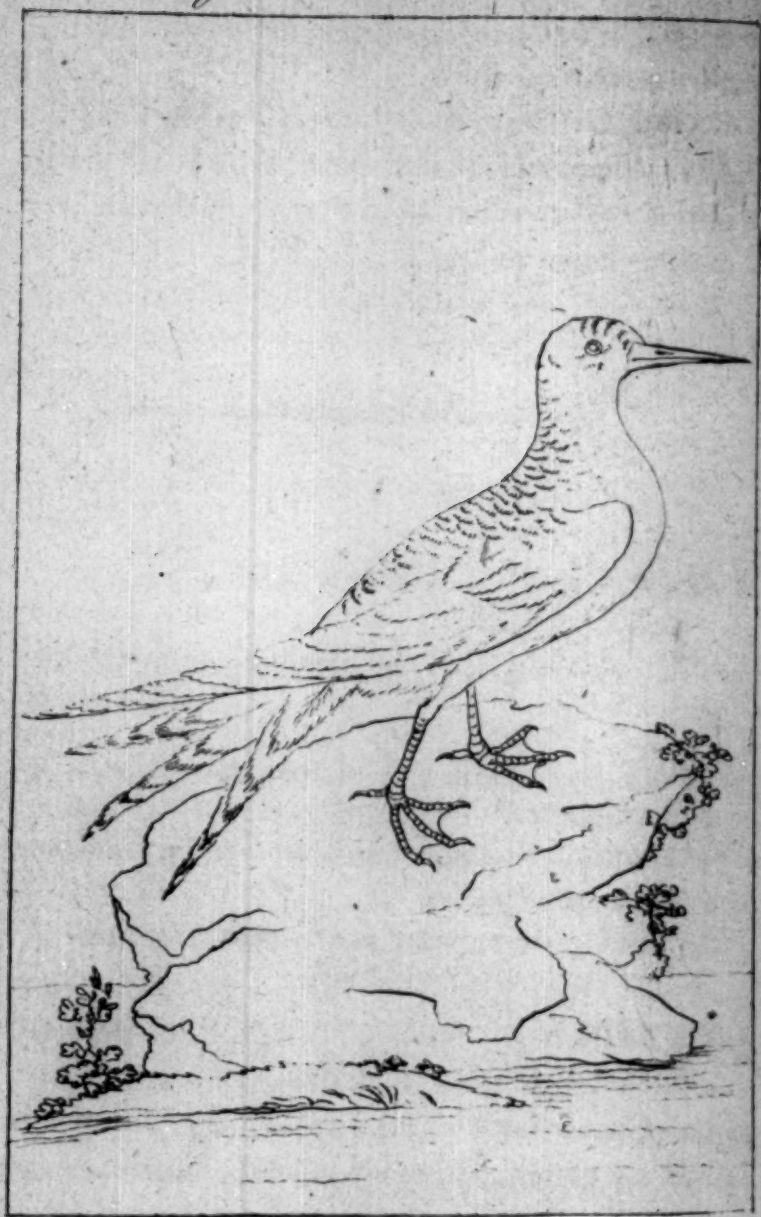
ORDER 3

Genus 38 Sterna.



TERN.

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very troubleſome to the ſhepherds who attend their flocks upon the hills.

The ſhepherds defend themſelves by holding a ſtick, ſharpened at one end, above their heads; and the Skua often kills itſelf upon the ſtick, as it darts down to attack them.

GENUS 38. STERNA.

THE TERN.

The bill is ſtrong, ſlender, nearly ſtraight, ſharp, and a little compreſſed.

The noſtrils are linear (that is very narrow,) and placed at the bottom of the beak.

The wings are very long, and the back toe is ſmall.

TERNS are frequently called Sea Swallows, becauſe in general, they have forked tails; and like Swallows, they have long wings, and are conſtantly flying near the ſurface of the water.

The

Terns ſkim the waves, and ſeize the little fiſh that are upon the ſurface. Their feet have little membranes, drawn back between the toes, which would be of very little uſe in ſwimming. They ſeem to depend only upon their wings, which are very long, and ſloped, like thoſe of the common ſwallow; and they uſe them, in the ſame manner, to hover, to ſail, to dart through the air, in raiſing, lowering, ſtopping, and croſſing their flight in many different directions. They ſeize their prey as they fly, or reſting an inſtant only, on the water: for they are not fond of ſwimming. They frequent the ſhore, or lakes and large rivers. They make a loud, piercing, and ſhrill cry, eſpecially when the weather is calm, and when they riſe very high in the air; or when they aſſemble together in the ſummer. They are moſt noiſy in the ſeaſon when they breed; and as they are very numerous, one cannot approach the place where they lay their eggs without being almoſt deafened by their noiſe. They come upon the Engliſh coaſt about May: ſome of them devour inſects, which they take in the air as they fly. They are not frightened at the noiſe of fire-arms; for if one be wounded, others will ſurround him, and fall with him nearly to the ſurface of the water.

It is obſerved, that the common Swallow does not much alter the direction of his flight at the diſcharge of a gun.

Birds of paſſage, who are ſo much on the wing, have not the ſame opportunity as birds who are perched upon trees, or concealed in hedges, of obſerving, and knowing, their moſt dangerous enemy.

The legs of Terns are bare of feathers, and the body is covered with a thick down, which is the caſe with moſt water-fowl. They are found in the Northern regions; and in the South Sea, which divides America from Aſia, and in almoſt every climate between.

The Noddy is another Tern; his tail is in the ſhape of a wedge, the body is of a browniſh black, the forehead white, with black round the eyes. It is found in the ſeas, near the coaſt of America; and is ſcarcely afraid of man, for it frequently alights upon the maſts and the yards of ſhips, and ſometimes upon the hands of the ſailors, if they hold them out. Noddies aſſemble about breeding-time, and fiſh together in flocks, ſkimming continually the ſurface of the ſea, to catch thoſe little fiſh which are crowded together on account of the high winds.

They

They ſeem to employ themſelves in this fiſhing with great gaiety and cheerfulneſs, if we may judge from the variety of their cries, which may be heard at a great diſtance: but they only flock together in breeding time; afterwards they all diſperſe.

The tail of the common Tern is forked; the two outer tail feathers are half white and half black. They are found in the ſeas near Europe. The male and the female always fly together. They are very quick and ſkilful fiſhers, and digeſt the fiſh almoſt as ſoon as they are ſwallowed: that part which is the loweſt digeſts firſt. The female lays two or three large eggs, in a little hollow in the ſand, always ſheltered from the north wind; and if any perſon approach the neſt, both the birds attack him, crying very loud and frequently. The female ſits on her eggs only in the night, or whilſt it rains in the day: at all other times ſhe leaves them to be hatched by the heat of the ſun. The young draw themſelves along, and leave the neſt almoſt as ſoon as they are hatched. The parents feed them with pieces of fiſh, and cover them under their wings at night. But this care does not continue long. The little ones then keep themſelves warm by lying cloſe together: and the parents, inſtead of feeding them with their beaks,

let

let the pieces of fiſh, as they fly above, fall down amongſt them. In caſe of danger, the old birds, as they ſkim along, inform their young by a cry: they inſtantly ſit, without motion, on the ſand, and then they may be picked up like ſtones, by the hand, for they do not attempt to eſcape. It is ſix weeks after they are hatched before they fly: this time is neceſſary for their wings to grow, for their wings are very long.

The brown Tern, when taken, may be kept tame. Fiſhermen ſometimes catch it, by making a croſs of wood float upon the water: to the middle of the croſs they faſten a little fiſh; and to the four corners ſome bird-lime twigs: amongſt theſe the Tern, as it darts down upon its prey, entangles its wings and is taken. The tail of this Tern is a little forked, the body is grey, the head and beak black, and the legs red.

The leſſer Tern has a forked tail, white body, grey back, the forehead and the eyebrows white. It is ſcarcely ſo large as a common Swallow. The forehead has a diviſion of white, from whence a ſtreak of white goes on each ſide, above the eyes. The back is aſh-colour; the ſtomach, the breaſt, and the lower ſide of the neck are white; the beak and feet are red.

There

There is another Tern that feeds moſtly on inſects. Terns of this kind are not very noiſy. They lay their eggs in tufts of graſs or moſs, upon hillocks ſurrounded with water, or on the banks; they collect a few bents, and make a ſlight neſt: they ſit ſeventeen days on their eggs, which all hatch the ſame day.

GENUS 39. RYNCHOPS.

THE SKIMMER, OR CUT-WATER.

The bill is much compreſſed, it is ſtraight; the upper mandible is much the ſhorter; the lower ſeems as though cut off at the end.

FROM the ſtrange form of its beak, the Skimmer can neither bite with the ſide, gather any thing before it, or peck with the point, the lower mandible is ſo much longer than the upper, which only falls upon it as a razor on its handle; ſo that the bird, in order to feed itſelf, is obliged

ORDER 3

Genus 39 Rynchops

SKIMMER.

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B L

obliged to ſkim the ſurface of the water, rippling it with its lower mandible, to catch the fiſh as it flies. Though its wings be long its flight is ſlow, that it may the better ſee the little fiſh on which it preys. In ſtormy weather it ſeeks the ſhore, and lives on oyſters and other ſhell fiſh, which, from the form of its bill, it can readily open.

Skimmers are found in the American Seas: their backs are black or duſky, their breaſts and ſtomachs white, and the bill is red at the baſe.

ALL the Birds which we have been reading about in this volume, belong to the order of the Anſeres.

The general character of this order is, that the beak is employed, in ſome genera, as a kind of ſieve or filter to ſtrain the water and ſtop the food; it is ſmooth, covered with an epidermis, that is ſkin, and in many ſpecies wideſt at the end.

The feet are webbed for ſwimming; the thighs are flattened and ſhort.

The

The body is fat, the ſkin is tough, the feathers are excellent, becauſe they are more uſeful than thoſe of any other order of birds; the fleſh is rather rank.

They feed in the water upon plants and fiſh.

The neſt, in many ſpecies, is built upon the ground.

The mother ſeldom broods the young.

In many inſtances, they do not keep together in pairs.

The Anas Genus, that is to ſay, the Swans, Geeſe and Ducks have a denticulated bill; that is a bill, the ſides of which are toothed like a ſaw; but the teeth are membranous, or like a ſkin; and the beak has a nail at the end.

The beak of the Mergus, or Gooſander, has a nail, and it is denticulated; but the teeth are very ſharp and ſlender.

The Phaeton Genus, or the Tropic Bird, has a cultrated bill like the Picæ, but denticulated.

The Plotus, or Darter, has a ſlender bill denticulated.

The Rhyncops, or Cut-Water, has a ſtrong bill, not denticulated, the upper mandible the ſhorteſt.

The

The Diomedea, or Albatroſs, has a ſtrong bill, not denticulated, the lower mandible ſeems as though it were cut off at the point.

The Alca Genus, or Auk, has a ſtrong bill, not denticulated, with tranſverſe furrows on the ſides.

The bill of the Porcellaria, or Petril, is not denticulated; the noſtrils ſeem to lie along upon it, and are a little cylindric.

The bill of the Pelicanus is not denticulated, and its face is naked.

The bill of the Larus, or Gull is ſtrong, and has a prominence, that is a knob, on the under part of the lower mandible, and it is not denticulated.

The Sterna, or Tern's bill is ſlender, not denticulated, and compreſſed at the point.

The Colymbus Genus, that is, the Divers, Grebes, and Guillemots, have ſlender bills, not denticulated, a little compreſſed at the ſides.

THE more we examine the works of God, the more proofs we ſhall find of his wiſdom and goodneſs: let us then obſerve his attention to, and kind care of the Birds, of which we have

juſt read. Thoſe which were intended to live in the water, have a number of feathers that grow cloſe together; and their bodies are covered with a warm down, which preſerves them from the ſevere cold. Their feathers too are gloſſed over with an oil, that prevents the wet from penetrating (that is, coming through) them.

That good Being has furniſhed them with a little bag of oil, which grows near their tail: all Birds indeed have this bag; but it is much larger in water-fowls, becauſe they have more occaſion for it. When their feathers get rough, they ſqueeze this oil bag with their bill; then they draw the bill over their feathers, which makes them ſmooth and gloſſy, and prevents the water from wetting them.

We obſerve too that they have all webbed feet: they uſe theſe like oars, in the water, to puſh themſelves forwards; as they ſpread them very wide, and ſtrike them againſt the water, they can move on very faſt; and when they draw them up to their bodies, then they bring their toes cloſe together, ſo as not to ſtop their motion.

The Swans neck is very long, becauſe he lives upon fiſh, and upon weeds which grow under water.

The bill of the Swan, and the Gooſe, and the Duck are broad, becauſe they gather their food very much out of the mud: their tongues are fringed, and the ſides of their bills toothed, or ſerrated, that they may filter the water through, and only keep behind the ſpawn of the fiſh, the eggs, or the larva of inſects; or the grain or ſeeds which they find in the water.

The Auks, place their eggs upon the bare rock, and have been furniſhed by that good Being, with a kind of glue, or cement, which prevents it from falling.

The Petrels, which inhabit cold climates, beſides a warm covering of feathers, are very fat, and abound in oil. This preſerves them from the cold; for no animal that is fat is much affected with cold. Mr. RAY has obſerved pigs, that were fat, lie on the bare ground, expoſed on cold froſty nights, without any inconvenience; whilſt ſome pigs, that were leaner, ran ſhivering into the ſtye, and ſeemed to be quite benumbed with the cold.

Albatroſſes have long wings, which enable them to take very diſtant flights, and to ſeize the Flying Fiſh the moment that they quit the water. Whilſt the Penguins have ſcarcely any wings;

indeed they could have but very little occaſion for them, becauſe they live only upon fiſh, which they take under water. For this reaſon, that good Being has placed their legs much more backward than thoſe of moſt other birds. This enables them to dive aſtoniſhingly well, and to purſue, and to overtake the fiſh, even in their own element.

How wonderful is the contrivance of the Pelican. His pouch is a kind of magazine, in which he can ſtore away a number of fiſh; and yet it is ſo contrived by that wiſe and good Being, that it ſhall keep the fiſh cool, and without ſpoiling.

The Gannet, one of the Pelican ſpecies, has ſtrong wings. He darts like lightning into the water, to a prodigious depth, after his prey: he is provided with a very quick ſight, that he may ſee the fiſh at a diſtance, and he has a covering to preſerve it.

The long neck of the Darter enables him in an inſtant to ſtrike his prey, and is another proof of the care that that good Being has taken for his preſervation.

In the Divers, the legs are placed remarkably backward: they are flat and broad, and admirably contrived to enable them to dive, to dart forward, and

and turn in every direction under water; ſo that the fiſh can ſcarcely ever eſcape them.

The long wings of the Gull, and the form of his legs, which are well contrived for running, are admirably fitted to his way of life, either to ſeize the fiſh as they riſe to the ſurface, or to catch thoſe that the ſea has thrown upon the ſhore.

The beak of the Skimmer, and his manner of feeding, are perfectly ſuited to each other.

How various, how wonderful, are the ſeveral forms, and inſtincts, and habits of animals! What ſkill appears in their ſtructure; what wiſdom in their inſtincts; and what goodneſs in that proviſion which a bountiful and benevolent Creator has made for them all! Every part of the creation ſhews his wiſdom, and partakes his care. "He feeds the Raven, and clothes the Lilies of the Field."

FINIS.

ERRATUM.

Page 11, line 8, after *Island*, read, *called the Beering Goose.*

BL

DIRECTIONS *for placing the* PLATES *in* PART II.

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Canada Gooſe - - - - - - 10
Eider Duck - - - - - - - - 12
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